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DISTRIBUTION AND MIGRATION OF NORTH AMERICAN RAILS AND THEIR ALLIES.

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INTRODUCTION.

The North American rails and their allies, the cranes, gallinules, coots, and others, are considered game birds in many localities, but until within the last few years they have received scant protection. As a matter of fact they include among their number several species that are not only of harmless habits but of great food value. This is particularly true of the sora, or Carolina rail, which until recently has existed in immense numbers in the marshes of the Atlantic States, and which not only has been a favorite object of pursuit by sportsmen but also has been regarded as a highly prized table delicacy.

Another species, than which none more striking exists in North America, is the stately white crane. This bird used to stalk over the prairies but is now almost extinct, and a few more years will probably witness the passing of the last individual. The draining of the Everglades probably will mark the end also of the contingent of its smaller relative, the sandhill crane, which nests in Florida. While the destruction of such birds is to be deplored it seems to be a necessary concomitant of the settlement of the wide areas they once called home. A large bird that furnishes meat of a high grade can not be expected to survive long in a thickly settled country. Owing to their fine appearance, harmless habits, and economic worth, it is highly desirable to withdraw all cranes from the list of game birds and preserve as long as possible the few now remaining.

Rails differ markedly from cranes in appearance and habits, although they belong to the same family. Chiefly marsh or meadow breeding birds, they spend most of their time well concealed in rank swamp vegetation, where they are out of harm's way. Several of the species are few in numbers, but they are so secretive that they

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Note.—This bulletin aims to give precise information as to the ranges of the several species of North American rails and their allies, the cranes, gallinules, coots, and others, especially in regard to breeding ranges and migrations; and to furnish data sufficient to serve as a basis for protective legislation for the species by States in which they are found.

probably maintain their numbers in spite of persecution. The one striking exception is the sora, or Carolina rail, for which a special plea needs to be entered.

Considered a game bird in many parts of the United States, the sora has rapidly decreased in numbers. Many hunters are fond of the sport of rail shooting, and since each hunter requires a boat and a pusher, the rail-shooting season is an important factor in the total yearly income of a large number of boatmen in the neighborhood of rail marshes.

The sora was originally the most abundant of the rails, and is still able to care for itself during the breeding season, when it is thinly scattered over an immense area of fresh-water marshes. During migration, however, it betakes itself to tidewater marshes and here falls an easy prey to the hunter. Each high tide forces the bird from its safe retreat in thick grass or bushes and affords the hunter a chance to pursue his game in the open, when the number of sora killed is almost past belief. A long-noted resort for the sora is the flat land near the mouth of the James River, Va. Here at the height of the fall migration in September the reeds used to be fairly alive with countless thousands of these birds. That their number is now sadly reduced can easily be understood from the hosts that have been shot on these marshes. Two men in two days, September 15–16, 1881, killed 1,235 of the birds, while as many as 3,000 have been shot in a single day on a marsh of hardly 500 acres. In the light of such figures no one need ask what is becoming of the game birds or what is their probable fate. Immediate steps should be taken to decrease the bag limit in order to prevent the destruction of the species.

The sora is a game bird that should be especially fostered. Its habits are absolutely harmless; it breeds only in places that are not suitable for agricultural purposes; it will live and thrive in marshy spots too small to harbor any other species of game bird; and it is so widely distributed and so capable of adapting itself to a wide range of conditions, that if given a fair chance and not too severely harassed during the shooting season, it will survive in abundance as a game bird long after many other species have succumbed before the advance of intensive agriculture.

While the salt-marsh breeding rails have not been so severely persecuted as the sora, they are numerous enough and important enough both for food and sport to warrant more effective protection than has hitherto been afforded them. They should at least be allowed to breed in peace, and robbing their nests should be prohibited.

A word may be said also in favor of the much despised coot. Many hunters class this bird with the crow as regards edible qualities. However, those who have tasted coot only in winter or spring after it has fed for many weeks on the animal life of the salt-water marshes, would not recognize the taste of the bird in October in northern Minnesota, after it has been fattened on that best of all duck foods, wild rice. But everywhere in the United States coots and gallinules should be recognized by law and their killing should be forbidden during the closed season on ducks, if for no other reason than that their slaughter may not be used as a blind to hide the killing of the more valuable ducks.

DISTRIBUTION.

The North American rails and their allies include 36 species and 8 subspecies, a total of 44 forms. Twenty-one of these (16 species and 5 subspecies) are found only in the West Indies and Middle America, and two are Eastern Hemisphere species that are casual or accidental in North America. This leaves 18 species and 3 subspecies, or 21 forms, that occur in the United States.

SOUTHERN FORMS NOT RANGING NORTH TO THE UNITED STATES.

Cuban king rail (*Rallus elegans ramsdeni*).
Mexican king rail (*Rallus tenuirostris*).
Bahama clapper rail (*Rallus crepitans coryi*).
Caribbean clapper rail (*Rallus longirostris caribaeus*).
Cuban clapper rail (*Rallus longirostris cubanus*).
Yucatan clapper rail (*Rallus pallidus*).
Spotted rail (*Limnopardalus maculatus*).
Lawrence wood rail (*Aramides axillaris*).
Cayenne wood rail (*Aramides cajanea*).
Mangrove wood rail (*Aramides albiventris*).
Nicaragua wood rail (*Aramides plumbeicollis*).
Red rail (*Amaurolimnas concolor*).
Mexican yellow rail (*Porzana goldmani*).
Yellow-bellied rail (*Porzana flaviventris*).
Rufous rail (*Porzana rubra*).
Ash-headed rail (*Creciscus cinereiceps*).
White-throated rail (*Creciscus albigularis*).
Wandering rail (*Creciscus exilis vagans*).
Caribbean coot (*Fulica caribaea*).
American finfoot (*Heliornis fulica*).
Guatemalan sun bittern (*Eurypyga major*).

EURASIAN FORMS ACCIDENTAL IN GREENLAND.

Spotted crake (*Porzana porzana*).
European coot (*Fulica atra*).

FORMS RANGING IN THE UNITED STATES.

Whooping crane (*Grus americana*).
Little brown crane (*Grus canadensis*).
Sandhill crane (*Grus mexicana*).
Limpkin (*Aramus vociferus*).
King rail (*Rallus elegans*).
Belding rail (*Rallus beldingi*).
California clapper rail (*Rallus obsoletus*).
Light-footed rail (*Rallus levipes*).
Clapper rail (*Rallus crepitans crepitans*).
Louisiana clapper rail (*Rallus crepitans saturatus*).
Florida clapper rail (*Rallus crepitans scotti*).
Wayne clapper rail (*Rallus crepitans waynei*).
Virginia rail (*Rallus virginianus*).
Sora, or Carolina rail (*Porzana carolina*).
Yellow rail (*Coturnicops noveboracensis*).
Black rail (*Creciscus jamaicensis*).
Farallon rail (*Creciscus coturniculus*).
Corn crake (*Crex crex*).
Purple gallinule (*Ionornis martinicus*).
Florida gallinule (*Gallinula galeata*).
Coot (*Fulica americana*).

MIGRATION.

Rails and their allies include both migratory and nonmigratory forms. Most of the salt-water species remain in the same marshes the entire year, while the greater number of those breeding near fresh water perform longer or shorter migrations. Much misunderstanding has arisen in regard to the powers of flight of some of the species. The flight of the sora is so slow and labored and the bird seems so reluctant to use its wings that some writers have supposed that it was unable to fly long distances and that its migration was therefore a series of short flights or even performed on foot. As a matter of fact the sora is among the long-distance migrants, the most northern breeders traveling not less than 2,500 miles to the nearest winter home; and those wintering south of the Equator being at least 3,000 miles from the nearest breeding grounds. Thousands make the hundred-mile flight between Florida and Cuba, and there is reason to believe that many individuals easily achieve the 500-mile passage from Florida to Yucatan, and the equally long journey from the West Indies across the Caribbean Sea to South America.

As in previous bulletins of this nature,[1] the data on distribution and breeding have been collected from both published and unpublished sources; the migration data are taken principally from reports of observers scattered all over the United States and Canada, who for 30 years have been furnishing the Biological Survey extensive records of bird movements.

NORTH AMERICAN RAILS AND THEIR ALLIES.

WHOOPING CRANE. *Grus americana* (Linnaeus).

Range.—North America, from northern Mackenzie to Florida and central Mexico.

Breeding range.—Many years ago, when the whooping crane was common, it was known to nest north to Great Slave Lake (Coues) and south to Oakland Valley, Iowa (eggs in U. S. National Museum), the breeding range being a northwest and southeast strip 1,500 miles long by less than 300 miles wide. The species probably nested over a much wider area, since Hearne says that in his day, about 1770, it occurred on the coast of Hudson Bay [near Fort Churchill], and on May 25, 1865, Macfarlane saw it at Fort Anderson, Mackenzie, and about the same time Ross saw it at Fort Simpson, Mackenzie. It nested east of Dubuque, Iowa (Coues), Mille Lacs, Minn. (Trippe), and Oak Point, Man. (Small); and west to Spirit Lake, Iowa (Mosher), Herman, Minn. (Roberts and Benner), Larimore, N. Dak. (Eastgate), Qu'Appelle, Sask. (Hind), and Stony

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[1] Bul. 45, Biol. Surv., U. S. Dept. Agr., 1913, "Distribution and Migration of North American Herons and Their Allies," et al.

Plain, Alta. (Stansell). At the present time the species has probably ceased to breed anywhere in the United States or Manitoba, and the few remaining individuals—for the species is almost extinct—spend the summer in southern Mackenzie and the northern parts of Alberta and Saskatchewan.

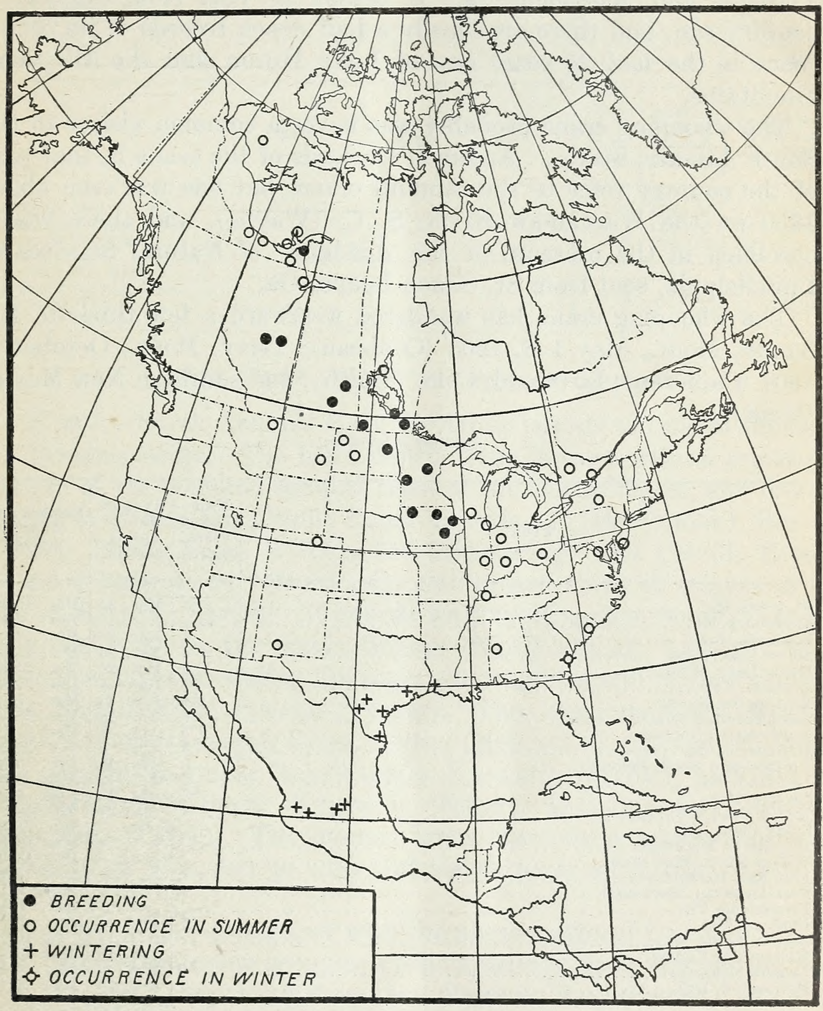

FIG. 1.—Whooping crane (*Grus americana*).

Winter range.—The winter range is rather restricted, extending from southern Louisiana (Audubon), along the coast of Texas to northern Tamaulipas (Nelson), La Barca, Jalisco (Goldman), and Silao, Guanajuato (Nelson). Formerly the species ranged in winter eastward to western Florida (Nuttall).

Migration range.—The whooping crane seems to have had a pronounced southeastward migration in the fall, bringing it to Emsdale, Ont. (Fleming), Yarker, Ont. (Ewart), Cayuga Lake, N. Y. (Eaton), and Beesleys Point, N. J. (Turnbull). There are good grounds for believing that in early colonial times it wandered not rarely to Vermont and Massachusetts. It ceased to visit New England a century ago, and there are hardly a half dozen records of its occurrence in the last 25 years east of Lake Huron and the Allegheny Mountains.

The whooping crane probably was never a common visitor to the South Atlantic States. Audubon's records of the crane in that part of the country refer to the sandhill crane, but one was seen about 1850 on the Waccamaw River, S. C. (Wayne), and there was a specimen in the museum of the Academy of Natural Sciences of Philadelphia, sent from St. Simon Island, Ga.

The whooping crane has wandered westward a few times to Big Sandy, Mont., May 1–5, 1903 (Coubeau); Terry, Mont., October 5, 1904 (Cameron); Loveland, Colo. (Smith); and southern New Mexico (Henry).

Spring migration.

Place.	Number of years' records.	Average date of spring arrival.	Earliest date of spring arrival.
St. Louis, Mo	3	Mar. 22	Mar. 17, 1884
Stotesbury, Mo			Mar. 9, 1894
Indianola, Iowa	4	Mar. 24	Mar. 18, 1901
Storm Lake, Iowa	4	Mar. 25	Mar. 22, 1886
Heron Lake, Minn	5	Mar. 28	Mar. 20, 1889
Bonham, Tex	3	Mar. 24	Mar. 23, 1890
East-central Kansas	4	Mar. 18	Mar. 7, 1887
Southeastern Nebraska	5	Mar. 20	Mar. 16, 1890
Northeastern Nebraska	5	Apr. 3	Mar. 23, 1900
Harrison, S. Dak. (near)	3	Apr. 5	Mar. 25, 1890
Northeastern North Dakota	8	Apr. 10	Apr. 5, 1885
Loveland, Colo	2	Apr. 12	Apr. 8, 1889
Aweme, Man	8	Apr. 12	Apr. 6, 1900
Indian Head, Sask. (near)	4	Apr. 23	Apr. 19, 1904
Stony Plain, Alta			May 21, 1909
Hay River, Mackenzie			May 12, 1908
Willow River, Mackenzie			May 13, 1905
Fort Rae, Mackenzie			May 15, 1860
Fort Anderson, Mackenzie			May 25, 1865
Brownsville, Tex			Apr. 1, 1877
Bonham, Tex	3	Apr. 5	Apr. 9, 1886
Bay St. Louis, Miss			Apr. 15, 1902
East-central Kansas	4	Apr. 15	Apr. 18, 1891
Eastern Nebraska	4	May 10	May 16, 1890
Harrison, S. Dak	2	Apr. 30	May 15, 1891

Eggs have been taken April 25, 1868, at Dubuque, Iowa (specimens in U. S. National Museum); May 2, 1882, at Clear Lake, Iowa (Goss); May 26, 1894, near Eagle Lake, Hancock County, Iowa (Anderson); and May 16, 1900, at Yorkton, Sask.

Fall migration.

Place.	Number of years' records.	Average date of fall arrival.	Earliest date of fall arrival.
Southeastern South Dakota	3	Sept. 8	Sept. 8, 1891
Eastern Nebraska	6	Oct. 6	Sept. 19, 1891
Indianola, Iowa			Sept. 4, 1902
Hickman, Ky			Aug. 26, 1886
Bonham, Tex			Oct. 8, 1888

Place.	Number of years' records.	Average date of the last one seen.	Latest date of the last one seen.
Aweme, Man	3	Oct. 10	Oct. 12, 1904
Harrison, S. Dak	2	Oct. 29	Nov. 1, 1891
Eastern Nebraska	3	Oct. 26	Nov. 12, 1890
Onaga, Kans			Oct. 18, 1907
Heron Lake, Minn			Nov. 13, 1885
Decatur County, Iowa			Nov. 12, 1871
Bonham, Tex	3	Nov. 19	Nov. 22, 1888

LITTLE BROWN CRANE. *Grus canadensis* (Linnaeus).

Range.—North America from the Arctic islands to central Mexico.

Breeding range.—The little brown crane is the northern representative of the common sandhill crane of the United States, and breeds north to Ponds Bay, Baffin Land, latitude 73° (McClintock), Bay of Mercy, Banks Land, latitude 74° (Armstrong), and Colville River, Alaska, latitude 71° (Murdock); and ranges north in migration to Point Barrow (Stone). It breeds west to Kotzebue Sound, Alaska (Grinnell), Semiavine Strait, Siberia (Nordenskjold), Lawrence and Matthew Islands, Alaska (Nelson); and migrates still farther west to the Near Islands, Alaska (Turner). The breeding range extends south to the Nushagak River, Alaska (McKay), Big Island, Mackenzie (Coues), and near Cape Eskimo, Keewatin (Preble); and east to Southampton Island, Keewatin (Eifrig), and Igloolik, Melville Peninsula (Parry). The summer home therefore is a parallelogram, 2,500 miles from east to west and one-third as much from north to south.

Winter range.—Compared with the above outlined breeding range, the little brown crane occupies a comparatively small area during the winter season, extending from San Patricio, Tex. (Sennett), to Rio Verde, San Luis Potosi (Allen), Silao, Guanajuato (Nelson), and La Barca, Jalisco (Nelson and Goldman). A specimen was taken at San Rafael Mission near San Francisco, Cal., in January (Buturlin), but this probably was an accidental occurrence.

Migration range.—The little brown crane is a migrant in the region of the Rocky Mountains and the Great Plains lying immediately between the summer and the winter homes, but even here the records are few and far between, owing to the difficulty of distinguishing this species from the more common sandhill crane. The normal migration range may be said to extend east to Manitoba and

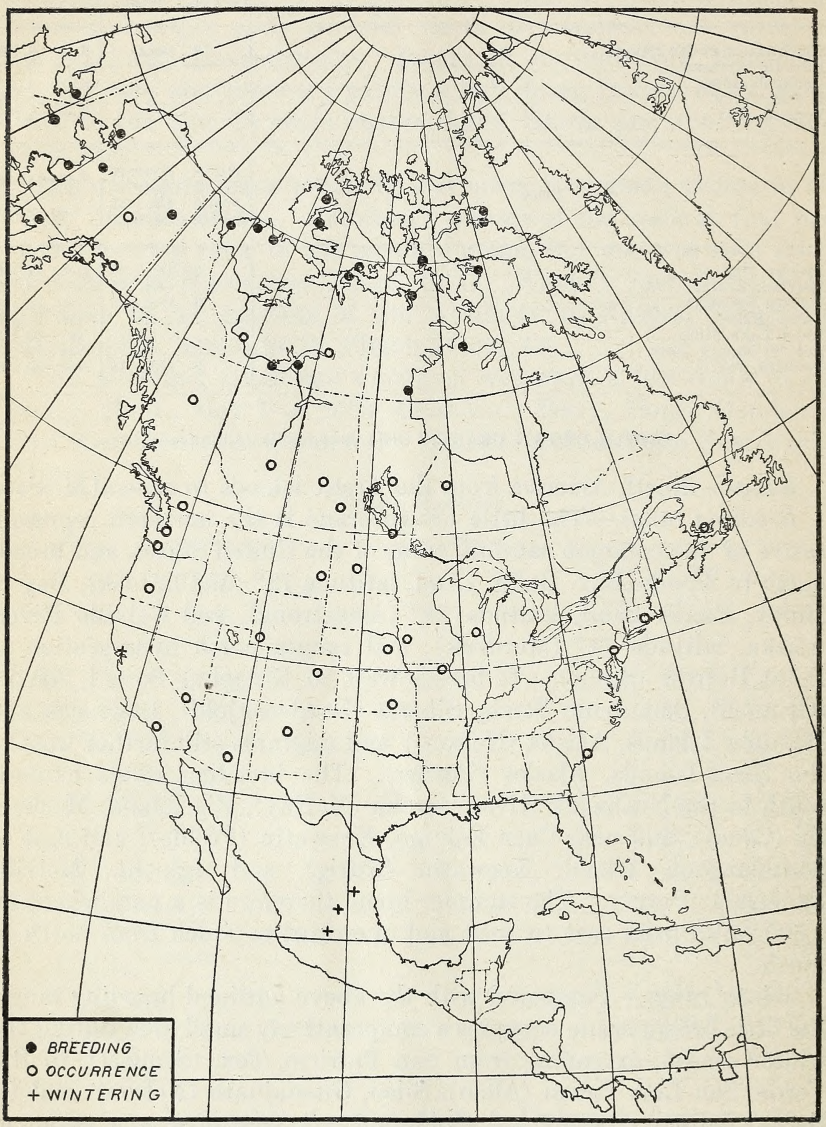

FIG. 2.—Little brown crane (*Grus canadensis*).

Iowa, beyond which wanderers have been recorded from Trout Lake, Keewatin (Murray); near Johnstown, Wis. (Kumlien and Hollister); Clark County, Mo. (Widmann); Alexander, Prince Edward

Island, September 22, 1905 (Moore); Natick Hill, R. I., October 9, 1889 (Howe and Sturtevant); and near Mount Pleasant, S. C., October 18, 1890 (Wayne). The species is rare on the Pacific slope, but has been noted at Chilliwack, B. C. (Brooks); Roy, Wash. (Thayer); Fort Klamath, Oreg. (Merrill); Ash Meadows, Nev. (Fisher); and Los Angeles, Cal. (Grinnell).

Spring migration.—The arrival of the species in spring has been noted in Clark County, Mo., April 10, 1896 (Widmann); Whiting, Iowa, April 6, 1886 (Anderson); near Johnstown, Wis., April 4, 1894 (Kumlien and Hollister); Portage la Prairie, Man., May 5, 1898 (Atkinson); Carlton House, Sask., April 28, 1827 (Richardson); Indian Head, Sask., April 28, 1910 (Lang); Fort Vermilion, Alta., April 24, 1906 (White); Hay River, Mackenzie, May 1, 1908 (Jones); Fort Resolution, Mackenzie, May 7, 1860 (Kennicott); Fort Providence, Mackenzie, April 28, 1905 (Jones); Fort Simpson, Mackenzie, May 9, 1904 (Preble); Felix Harbor, Franklin, latitude 70°, June 4, 1830 (Ross); Igloolik, Franklin, latitude 69°, June 25, 1823 (Parry); Los Angeles, Cal., March 21, 1904 (Grinnell); Ash Meadows, Nev., March 10, 1891 (Fisher); Okanogan Landing, B. C., April 20, 1906 (Brooks); Fort Kenai, Alaska, May 4, 1869 (Bischof); St. Michael, Alaska, May 7 (Nelson); near Kigulik Mountains, Alaska, May 10, 1905 (Anthony); Kowak River, Alaska, May 14, 1899 (Grinnell); Point Barrow, Alaska, June 1, 1883 (Murdock); and Bay of Mercy, Franklin, middle of May, 1852 (Armstrong).

If these isolated records represent the average dates of migration, then the little brown crane occupies about 65 days in passing the 2,800 miles from southern California to Banks Land, an average of about 40 miles a day or scarcely an hour's flight.

Eggs have been found at St. Michael, Alaska, May 27, 1879 (Nelson); Kowak River, Alaska, June 14, 1899 (Grinnell); and young just hatched at Montreal Island, Mackenzie, August 2, 1834 (King).

Fall migration.—Little brown cranes that had nested in Siberia were observed August 18, 1880, crossing Bering Strait to Alaska (Bean), and this probably represents about the beginning of the fall migration. The birds continue to pass south for a month and the last one seen is reported on Kowak River, September 4, 1898 (Grinnell); St. Michael, Alaska, September 27, 1880 (Nelson); Fort Reliance, Mackenzie, September 14, 1907 (Seton); near Athabasca Landing, Alta., September 22, 1903 (Preble); Terry, Mont., October 10, 1898 (Cameron); Okanogan Landing, B. C., September 22, 1888 (Brooks); Edmonds County, S. Dak., October 22, 1883 (specimen in U. S. National Museum); Glendo, Wyo., October 7, 1898 (Jesurun); and Bee County, Tex., October 25, 1887 (Sennett).

SANDHILL CRANE. *Grus mexicana* (Müller).

Range.—North America from southern Canada to Florida, Cuba, and Mexico.

Breeding range.—The sandhill crane has two distinct and widely separated breeding areas. The smaller includes Cuba (Gundlach), Isle of Pines (Gundlach), and southern Florida north to Waukeenah (Wayne), and Lake Monroe (Bryant). It has been known to nest in the Okefenokee Swamp, Ga. (Wayne); it nested in 1911 near

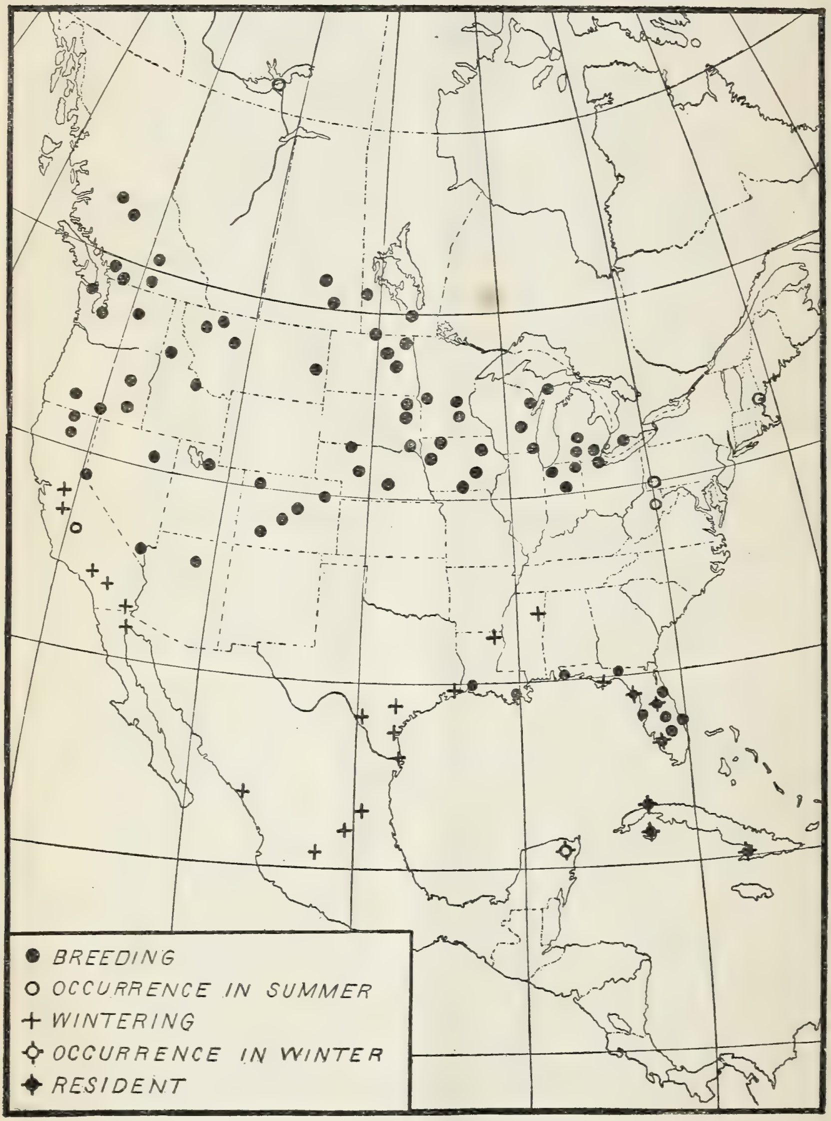

Fig. 3.—Sandhill crane (*Grus mexicana*).

Perdido Bay, Ala. (Gutsell), and it also breeds at Houma, La. (Wurzlow), and, as late as 1907, at Calcasieu Pass, La. (Kopman).

The larger breeding area extends north to near Rondeau, Ont. (McIlwraith), Morrice, Mich. (Brownell), Vans Harbor, Mich. (Van Winkle), Mille Lacs, Minn. (Trippe), Oak Point, Man. (Small), Shell River, Man. (Calcutt), Big Quill Lake, Sask. (Barnes), Midvale, Mont. (Bailey), 158-Mile House, B. C. (Brooks), and Strait of Juan de Fuca, Wash. (Cooper). The species is definitely known to have nested south to Chicago Junction, Ohio (Jones), Carroll County, Ind. (Sterling), Decatur County, Iowa (Trippe), Alda, Nebr. (Powell), Animas Park, Colo. (Drew), Mormon Lake, Ariz. (Mearns), Independence Valley, Nev. (Hoffman), near Carson City, Nev. (Ridgway), and Fort Crook, Cal. (Coues). Thus at the present time the two breeding areas are separated by a district more than 600 miles wide in which the species does not breed. It is probable that in the early days of the settlement of the Mississippi Valley, when the species was very abundant, it nested somewhat farther south, almost if not quite to the Ohio River. Its numbers have decreased decidedly in the last 30 years, and it is now rare as a breeder in the southern half of the above-defined breeding range, although within the last 10 years it has nested in southern Michigan (1907), northern Indiana (1905), northern Iowa (1907), northwestern Nebraska (1904), and central Colorado (1903).

Winter range.—The sandhill cranes that nest in Louisiana, Florida, and Cuba are probably nonmigratory, while their number in Louisiana is probably augmented during the winter by migrants from the north. The species also winters along the whole coast of Texas and south in Mexico to Hacienda Angostura, San Luis Potosi (Jouy), Guanajuato (Duges), La Barca, Jalisco (Nelson and Goldman), and Mazatlan, Sinaloa (Lawrence). The winter range includes southern California north to Pasadena (Daggett) and, in the early days, to the valleys of central California (Belding). Formerly a few wintered north to Waverly, Miss. (Young), and Mer Rouge, La. (Hollister), while 70 years ago many wintered along the Rio Grande north to Socorro, N. Mex.

Migration range.—The sandhill crane has been noted a few times east of its breeding range, north to Beaumaris, Ont. (Fleming); Brockport, N. Y. (Bruce); Lunenburg, Vt. (Perkins and Howe); Wakefield, N. H. (Allen); Waynesburg, Pa. (Jacobs); Washington, D. C. (Coues); and Waccamaw River, S. C. (Wayne).

It seems probable that in colonial days the sandhill crane was not uncommon as a migrant throughout most of eastern United States from New York and southern New England southward.

Spring migration.

Place.	Number of years' records.	Average date of spring arrival.	Earliest date of spring arrival.
Newport, Ark			Mar. 19, 1884.
Eubank, Ky	2	Mar. 12	Mar. 8, 1894.
Boiton, Mo	11	Mar. 23	Mar. 2, 1908.
St. Louis, Mo			Mar. 4, 1882.
Mount Carmel, Ill			Mar. 1–4, 1863–66
Tampico, Ill	6	Mar. 25	Mar. 8, 1887.
Bicknell, Ind	2	Mar. 20	Mar. 18, 1906.
English Lake, Ind			Mar. 7, 1894.
Petersburg, Mich	9	Mar. 15	Mar. 8, 1892.
Locke, Mich	19	Mar. 21	Feb. 19, 1857.
Grinnell, Iowa	5	Mar. 20	Mar. 11, 1890.
Storm Lake, Iowa	4	Mar. 20	Mar. 12, 1887.
Milford, Wis	5	Mar. 19	Mar. 13, 1851.
Elk River, Minn	5	Apr. 2	Mar. 22, 1887.
Heron Lake, Minn	5	Apr. 4	Mar. 30, 1884.
White Earth, Minn	4	Apr. 4	Mar. 27, 1881.
Grape Vine, Tex	14	Mar. 18	Mar. 4, 1892.
Gainesville, Tex. (near)	4	Mar. 14	Mar. 2, 1887.
Caddo, Okla			Feb. 26, 1884.
Richmond, Kans	5	Mar. 23	Mar. 11, 1885.
Topeka, Kans	4	Mar. 24	Mar. 16, 1891.
Onaga, Kans	5	Mar. 25	Feb. 14, 1896.
Syracuse, Nebr	5	Mar. 26	Mar. 12, 1898.
Badger, Nebr	3	Apr. 6	Mar. 26, 1902.
Southeastern South Dakota	11	Apr. 6	Mar. 26, 1910.
Argusville, N. Dak	13	Apr. 16	Apr. 8, 1895.
Larimore, N. Dak	10	Apr. 16	Apr. 12, 1890.
Bathgate, N. Dak	5	Apr. 15	Apr. 5, 1894.
Aweme, Man	13	Apr. 14	Apr. 6, 1905.
Shell River, Man	3	Apr. 15	Apr. 14, 1891.
Indian Head, Sask	7	Apr. 17	Apr. 7, 1906.
South Qu'Appelle, Sask	12	Apr. 16	Apr. 6, 1903.
Tombstone, Ariz			Feb. 13, 1910.
Southern Colorado	3	Mar. 16	Feb. 13, 1908.
Fort Shaw, Mont			Feb. 28, 1868.
Big Sandy, Mont			Apr. 6, 1905.
Lawen, Oreg			Apr. 1, 1909.

Resident sandhill cranes of Cuba and Florida nest much earlier than the migrants from farther north. In Cuba eggs are most common in March, but some are laid earlier, for specimens in the U. S. National Museum were taken at Lantana, Fla., February 6–23, 1894, and at Manatee, Fla., March 2, 1873. The earliest eggs at Jackson, Mich., were collected May 8, 1901, and May 5, 1902 (Arnold); Summerfield Township, Monroe County, Mich., May 2, 1880 (Arnold); Dubuque, Iowa, May 11, 1865 (specimens in U. S. National Museum); Hayfield, Iowa, about May 17, 1894 (Anderson); Delavan, Wis., May 30, 1883 (Kumlien and Hollister); Minnewaukan, N. Dak., May 2, 1898 (Rolfe); Camp Harney, Oreg., May 2, 1875, April 27, 1876, April 24, 1877, and April 14, 1878 (Bendire); Gunnison County, Colo., at 8,000 feet altitude, June 5, 1903 (Warren); and Big Quill Lake, Sask., June 20, 1909 (Barnes).

Fall migration.

Place.	Number of years' records.	Average date of fall arrival.	Earliest date of fall arrival.
Waverly, Mo			Oct. 10, 1890
Grape Vine, Tex	10	Oct. 13	Oct. 3, 1893
Onaga, Kans	5	Oct. 22	Oct. 12, 1898
Southeastern South Dakota	5	Sept. 17	Sept. 8, 1891
Beloit, Colo			Sept. 24, 1890

Place.	Number of years' records.	Average date of the last one seen.	Latest date of the last one seen.
Aweme, Man	7	Oct. 15	Oct. 31, 1900
Heron Lake, Minn			Nov. 9, 1885
Delavan, Wis			Oct. 23, 1892
Grinnell, Iowa	4	Oct. 16	Oct. 22, 1887
Bicknell, Ind			Oct. 27, 1894
Manchester, Mich			Nov. 24, 1896
Terry, Mont			Nov. 10, 1903
Southeastern South Dakota	4	Nov. 1	Nov. 7, 1889
Wet Mountains, Colo			Nov. 15, 1899
Eastern Nebraska	6	Oct. 25	Nov. 3, 1891
Richmond, Kans			Nov. 3, 1885
Caddo, Okla			Nov. 11, 1883
Bonham, Tex			Nov. 9, 1889

LIMPKIN. *Aramus vociferus* (Latham).

Range.—Southeastern United States, the Greater Antilles, and Central America.

The limpkin is a nonmigratory bird whose range extends from northwestern Costa Rica—Rio Frio (Richmond), Bebedero, La Palma, and Bolson (Carriker)—through western Nicaragua (Ometepe Island) and western Honduras (Ceiba) to Tehuantepec City, Oaxaca (Nelson and Goldman), and Alvarado, Vera Cruz (Sumichrast). It occurs in the Greater Antilles, but is rare in Porto Rico (Gundlach) and still rarer (if not now extinct) in Jamaica (Field). It was noted January 28, 1901, at Cay Lobos Light, Bahamas, near the northern coast of Cuba.

The species was formerly very abundant on the interior waters of Florida, and, though greatly reduced in numbers, it still occurs over most of its former range, which extended north to Waukeenah (Wayne) and Palatka (Hasbrouck). A few wander in winter to Indian Key, Key West, and the Tortugas (specimens in the U. S. National Museum), and have occurred casually at Twiggs Dead River, Aiken County, S. C., October 18, 1890 (Wayne); Charleston, S. C., July, 1904 (Wayne); and Brownsville, Tex., May 29, 1889 (Sennett).

The nesting season extends over nearly half the year, eggs having been found in Cuba during December and January (Gundlach), and on the Oklawaha River, Fla., from the middle of February to June 20 (Jackson).

KING RAIL. *Rallus elegans* Audubon.

Range.—Eastern United States and Cuba

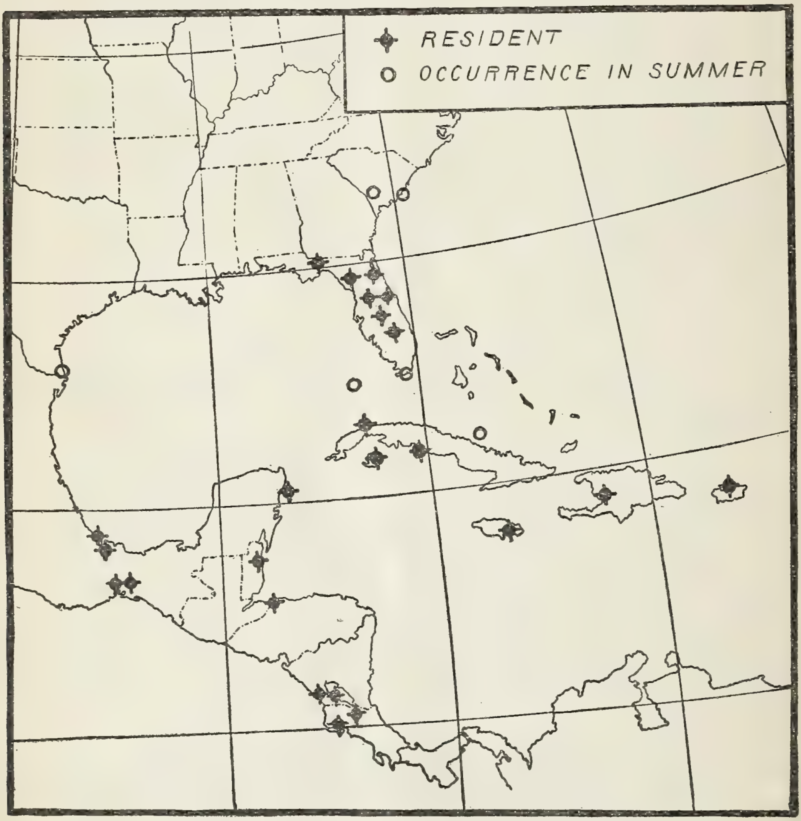

FIG. 4.—Limpkin (*Aramus vociferus*).

Breeding range.—The king rail is the large fresh-water rail of eastern United States, in contrast with the clapper rail, which is confined to salt marshes. The king rail breeds in Florida and north along the Atlantic coast to Saybrook, Conn. (Clark). While for the most part keeping in the marshes near the coast, it has been known to nest as far inland as Raleigh, N. C. (Brimley), and Columbia, S. C. (Taylor). In the Mississippi Valley and the region of the Great Lakes, it nests north to Ithaca, N. Y. (Wright and Allen), Buffalo, N. Y. (Reinecke), Pelee Island, Ohio (Jones), St. Clair Flats, Ont. (Swales), Ann Arbor, Mich. (Covert), Madison, Wis. (Slonaker), and Faribault, Minn. (Bullis). The breeding range extends west to Heron Lake, Minn. (Miller), Omaha, Nebr. (Bruner, Wolcott, and Swenk), Manhattan, Kans. (Lantz), and Wichita, Kans. (Matthews). The southern limit of normal breeding extends south to Wooster, Ohio (Oberholser), Circleville, Ohio (Bales), Greencastle, Ind. (Earle), Odin, Ill. (Vandercook), and Boonville, Mo. (Hoy). A few pairs breed south to Portageville, Mo. (Howell), and Eureka Springs, Ark. (Smith). The species has been reported to breed at Orange Lake, Fla. (Pearson), Whitfield, Fla. (Worthington), and at Greensboro, Ala. (Avery), while an individual too young to have been hatched at any great distance away was taken at Corpus Christi, Tex., July 14, 1910 (Thayer).

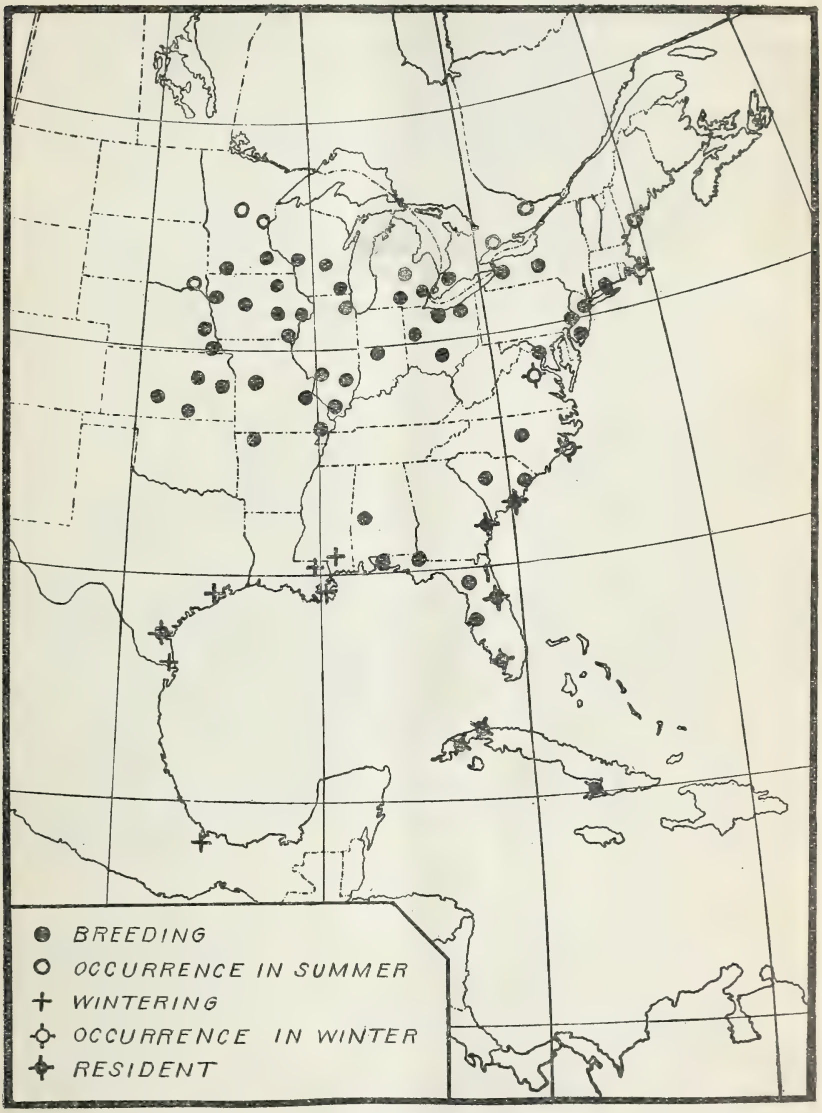

FIG. 5.—King rail (*Rallus elegans*).

Following are a few records of stragglers beyond the breeding area: Ottawa, Ont., May 7, 1896 (White); Ottertail County, Minn. (Roberts); Falmouth, Me., September 19, 1895 (Brock); Scarborough, Me., October 8, 1881 (Brown); and Vermilion, S. Dak. (Agersborg).

Winter range.—It can be said in general that the king rail winters in the southern part of the breeding range, and also in southern Louisiana (Beyer) and on the coast of Texas at least as far south as Brownsville (Thayer). There is one record of its occurrence in Mexico, probably as a straggler, at Tlacotalpam, Vera Cruz, January 18, 1901 (Colburn).

A remarkable fact in the life history of the king rail is its moving northward on the Atlantic coast after the breeding season and then attempting to winter there. Only a small percentage of the birds perform this northward migration, but there are many records north of their normal winter home in the marshes of South Carolina during the winter: Currituck Sound, N. C., December 14, 1909 (McAtee); Raleigh, N. C., January 23, 1892 (Brimley); Washington, D. C., December 12, 1908, December 16, 1889, December 21, 1892, January 19, 1901, and February 8, 1887; Stafford, Md., January 28, 1893 (Kirkwood); Milford, Conn., December 15, 1892 (Verrill); Saybrook, Conn., January 14, 1876 (Clark); Newport, R. I., January 21, 1896 (Howe and Sturtevant); Cambridge, Mass., December 30, 1896 (Farley); Ellisville, Mass., January 20, 1903 (Reagh); Chatham, Mass., December 28, 1908 (Fay); West Barnstable, Mass., December 30 or 31, 1909 (Howe); and Portland, Me., December 17, 1899 (Brook). A few far-northern winter records have been reported from the interior: Beaver Dam, Wis., December 19, 1906 (Snyder); near Port Huron, Mich., December 13, 1902 (Eppinger); Hudson, Mich., December 11, 1896 (Boies); Point Pelee, Ont., December 31, 1906 (Taverner and Swales); and South Buffalo, N. Y., December 3, 1897 (Savage).

Spring migration.

Place.	Number of years' records.	Average date of spring arrival.	Earliest date of spring arrival.
Raleigh, N. C	4	Mar. 26	Feb. 8, 1887
Montauk, N. Y			Mar. 3, 1887
Peabody, Mass			Mar. 13, 1908
Erie, Pa			Apr. 17, 1902
Fayette, Mo			Apr. 2, 1887
Chicago, Ill	14	Apr. 21	Apr. 10, 1887
Rockford, Ill			Apr. 3, 1887
Terre Haute, Ind	2	Apr. 26	Apr. 24, 1888
New Bremen, Ohio			Apr. 19, 1909
Oberlin, Ohio	5	May 7	May 4, 1908
Point Pelee, Ont			Apr. 22, 1908
Petersburg, Mich			Apr. 20, 1886
Keokuk, Iowa	5	Apr. 22	Apr. 10, 1894
Grinnell, Iowa			Apr. 5, 1889
Heron Lake, Minn	2	May 7	Apr. 22, 1890
Emporia, Kans			Apr. 14, 1885
Onaga, Kans			Apr. 23, 1891
Falls City, Nebr			Apr. 13, 1889

Young out of nest of the king rail were found at Mount Pleasant, S. C., March 22, 1913 (Wayne); eggs ready to be laid, at Greensboro, Ala., March 24, 1884 (Avery); eggs at Frogmore, S. C., March 22, 1884 (Hoxie); Raleigh, N. C., May 28, 1890 (Brimley); Washington, D. C., May 30, 1910 (Dickey); Tolchester, Md., May 30, 1891 (Fisher); Tinicum, Pa., June 2, 1907 (Carter); near Philadelphia, Pa., June 3, 1902 (Miller); Buffalo, N. Y., May 30, 1894 (Reinecke); Lyme, Conn., June 13, 1884 (Clark); Chicago, Ill., May 11, 1902–June 19, 1902 (Abbott); Aledo, Ill., May 12, 1880 (specimens in U. S. National Museum); Quiver Lake, Ill., May 18, 1895 (Silloway); Kewanee, Ill., May 22, 1893, and once as early as April 29, 1894 (Murchison); Circleville, Ohio, May 14, 1910 (Bales); Fays Lake, Mich., May 30, 1894 (Watkins); Iowa City, Iowa, May 29, 1884 (Clute); Manhattan, Kans., May 28, 1883 (Lantz); Lincoln, Nebr., May 30, 1910 (Zimmer); and Shawneetown, Ill., young out of nest, June 17, 1909 (Howell).

Fall migration.

Place.	Number of years' records.	Average date of the last one seen.	Latest date of the last one seen.
Bayport, N. Y			Nov. 2, 1886
Ithaca, N. Y			Nov. 29, 1901
Chicago, Ill	6	Sept. 14	Sept. 30, 1907
Canton, Ill			Oct. 27, 1894
Cedar Point, Ohio			Oct. 22, 1906
Keokuk, Iowa	3	Sept. 20	Sept. 26, 1899
Delavan, Wis			Oct. 22, 1894
Lincoln, Nebr			Sept. 22, 1900
Lawrence, Kans			Nov. 4, 1905
Caddo, Okla			Nov. 1, 1883

[CUBAN KING RAIL. *Rallus elegans ramsdeni* Riley.

The king rails of Cuba have recently been segregated under the name *ramsdeni*. The species is resident on the island and is fairly common. It is said to nest in June and July (Gundlach).]

[MEXICAN KING RAIL. *Rallus tenuirostris* Ridgway.

The Mexican representative, *tenuirostris*, of the common king rail (*elegans*) occurs in central Mexico from the Laguna del Rosario, Tlaxcala (Ferrari-Perez), to the Valley of Mexico (White), and Mazatlan (Lawrence). The species was found fairly common at Lerma during early July, 1904 (Nelson and Goldman), and eggs were taken the first day of that month.]

BELDING RAIL. *Rallus beldingi* Ridgway.

The Belding rail is a resident species in the Cape region of Lower California from Magdalena Bay southward. Eggs were taken at San Jose Island, Lower California, June 28, 1908 (Thayer).

CALIFORNIA CLAPPER RAIL. *Rallus obsoletus* Ridgway.

The California clapper rail has a very restricted range. It remains throughout the year in the salt marshes near the mouth of the Sacramento River, from Petaluma (Newberry) on the north to Palo Alto (McGregor) on the south. The species was very abundant in these marshes until about 1890, but it has decreased decidedly in numbers and is now rather rare, though several specimens were obtained October 18–30, 1909, at Redwood (Thayer). Eggs have been taken at Haywards, April 18, 1885 (Emerson); at San Mateo, April 24, 1879 (Bryant); and at Palo Alto, May 1, 1899 (Thayer).

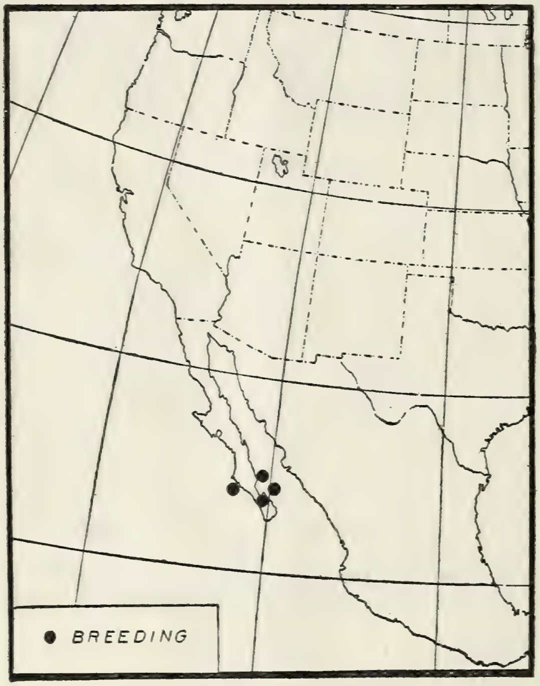

FIG. 6.—Belding rail (*Rallus beldingi*).

LIGHT-FOOTED RAIL. *Rallus levipes* Bangs.

The light-footed rail is a nonmigratory species occurring along the Pacific coast from Santa Barbara, Cal. (Henshaw), south to San Quintin Bay, Lower California. It is most common on the coast of Los Angeles and San Diego Counties. A specimen was taken August 25, 1902, at Yuma, Ariz. (Brown).

Eggs have been secured at Ballona, Cal., May 16, 1894 (Judson); Nigger Slough, Los Angeles County, Cal., May 29, 1906 (Willett); San Diego, Cal., April 16, 1895, and April 8–10, 1900 (Thayer); and at San Quintin Bay, Lower California, April 27, 1910 (Howell).

CLAPPER RAIL. *Rallus crepitans crepitans* Gmelin.

Range.—The clapper rail and its various subspecies inhabit salt-water marshes of the eastern United States from New England to Texas, and the Bahama Islands.

The species has been separated into five subspecific forms, the most northern of which, *crepitans,* the type, breeds from New Haven, Conn. (Bishop), south along the coast to Cobb Island, Va. (Fisher), though it is not common north of New Jersey. So abundant were these rails formerly on this coast that in September, 1896, near Atlantic City, about 10,000 were killed in two days. The species occurred once inland to Washington, D. C., September 18, 1882 (Coues); and has been noted at East Orleans, Mass., November 30, 1895 (Brewster); Plum Island, Mass., September 15, 1908 (Wharton); Boston Harbor, Mass., May 4, 1875 (Purdie); Kingston, Mass., December 29, 1885 (Browne); Sabattus Pond, Me., 1874 (Smith); and Popham Beach, Me., October 12, 1900 (Knight).

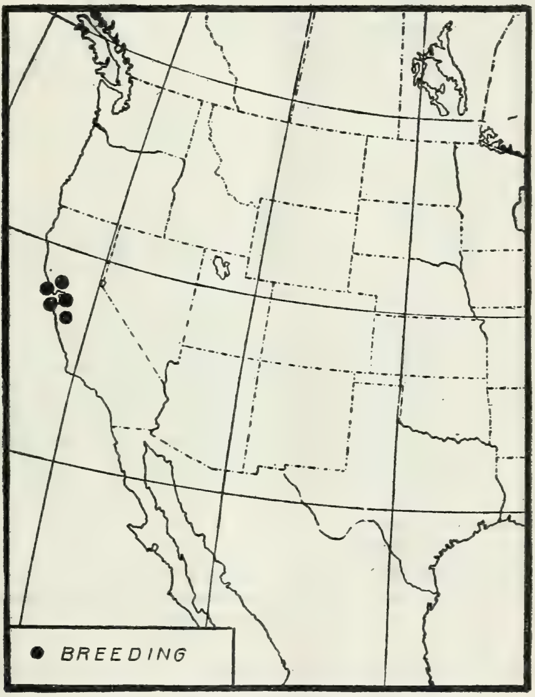

Fig. 7.—California clapper rail (*Rallus obsoletus*).

A few remain in winter as far north as Five Mile Beach, N. J. (Laurent), and occasionally on Long Island, N. Y. (Lawrence). They are abundant in winter on the coast of North Carolina, common in South Carolina, and range south to St. Marys, Ga. (Oberholser).

Eggs have been taken near Cobb Island, Va., from May 19, 1894, to July 17, 1884 (specimens in U. S. National Museum); Stone Harbor, N. J., May 28, 1907 (Carter), to July 7, 1903 (Miller); and South Oyster Bay, N. Y., May 24, 1884 (specimens in U. S. National Museum).

Birds that winter in Georgia sometimes remain there until after the local breeding birds have eggs, since specimens of *crepitans* were taken April 4, 1896, at St. Marys, Ga., while eggs of *waynei* have been found in Georgia in March.

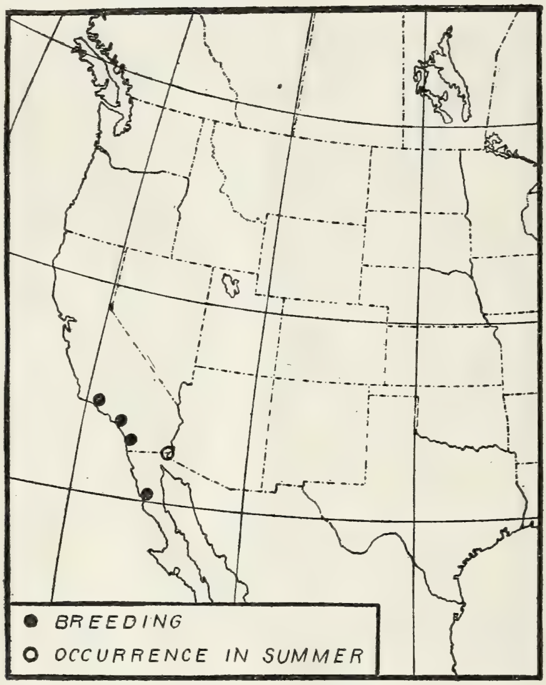

FIG. 8.—Light-footed rail (*Rallus levipes*).

LOUISIANA CLAPPER RAIL. *Rallus crepitans saturatus* Ridgway.

The Louisiana clapper rail is common and resident in the salt marshes of that State and ranges east to Perdido Bay, Ala. (Howell), and west to Corpus Christi, Tex. (Sennett).

Under this form are now included all the specimens from Texas that were formerly identified as *Rallus longirostris caribaeus.* Eggs have been taken near Corpus Christi, Tex., as late as July 23–27, 1910 (Thayer).

FLORIDA CLAPPER RAIL. *Rallus crepitans scotti* Sennett.

The Florida clapper rail is confined to Florida and is a resident of the western coast from Charlotte Harbor north to the mouth of the Suwanee River. Downy young have been found from early May to early July (Scott); and eggs, March 31, 1897, near the mouth of the Anclote River (Bishop).

WAYNE CLAPPER RAIL. *Rallus crepitans waynei* Brewster.

The Wayne clapper rail is the common rail of the salt-water marshes on the coast of South Carolina and Georgia and breeds south to Matanzas Inlet, Fla. (eggs in the U. S. National Museum), and north to Pea Island, N. C. (Bishop). It ranges in winter a short distance south of the breeding grounds to Dummits Creek, Fla. (Brewster), while a few remain through this season at the northern limit of the range on the coast of North Carolina (Bishop).

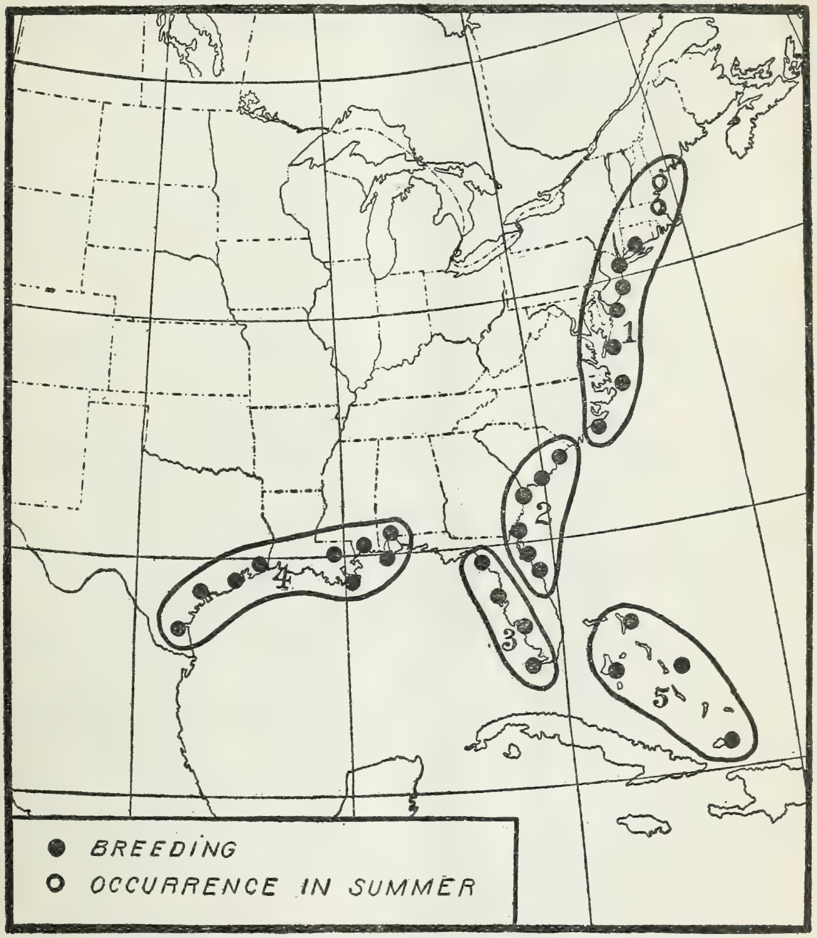

FIG. 9.—Clapper rail (*Rallus crepitans*). Subspecies: 1, *crepitans;* 2, *waynei;* 3, *scotti;* 4, *saturatus;* 5, *coryi.*

Eggs have been taken near Matanzas Inlet, Fla., May 28, 1895 (specimens in U. S. National Museum); McIntosh, Ga., March 29, April 16, and May 6, 1890 (specimens in U. S. National Museum); Mount Pleasant, S. C., April 10, 1903 (Wayne); Frogmore, S. C., June 9, 1886 (Hoxie); Fort Macon, N. C., May 9, 1869 (Coues); and Pea Island, N. C., May 20, 1901 (Bishop). They have been obtained at Amelia Island, Fla., as late as July 25, 1906 (Thayer).

[BAHAMA CLAPPER RAIL. *Rallus crepitans coryi* Maynard.

The Bahama clapper rail is quite common throughout most of the Bahamas, where it is resident.]

[CARIBBEAN CLAPPER RAIL. *Rallus longirostris caribaeus* Ridgway.

The Caribbean clapper rail is confined to the West Indies, occurring on most of the Lesser Antilles, the Bahamas, and Jamaica.

The form which occurs and is resident on Cuba has been separated under the name *Rallus longirostris cubanus* Chapman. The type species, *longirostris*, is confined to South America, ranging from Guiana to Peru.]

[YUCATAN CLAPPER RAIL. *Rallus pallidus* Nelson.

The type and only known specimen of the Yucatan clapper rail was taken April 15, 1893, on the Rio Lagartos, Yucatan.]

VIRGINIA RAIL. *Rallus virginianus* Linnaeus.

Range.—North America, from southern Canada to Florida and Guatemala.

Breeding range.—The Virginia rail is a common breeding bird in suitable localities throughout northern United States and north to Kentville, N. S., (Bishop), Scotch Lake, N. B. (Moore), Quebec City, Canada (Dionne), Ottawa, Ont. (White), Port Sydney, Ont. (Fleming), Kelly Brook, Wis. (Schoenebeck), Mille Lacs, Minn. (Trippe), Winnipeg, Man. (Hine), Chemawawin, Keewatin (Nutting), Little Manito Lake, Sask. (Atkinson), Columbia Falls, Mont. (Williams), 158-Mile House, B. C. (Brooks), and Goldstream, Vancouver Island, B. C. (Streeter). It has occurred casually north to Newfoundland (Reeks), Hamilton Inlet, Que. (Turner), York Factory, Keewatin (Bell), near Edmonton, Alta. (Stansell), and Campbell River, at the northern end of Vancouver Island, B. C. (Brooks).

Southward the breeding range extends to Cape May, N. J. (Stone), State College, Pa. (Harlow), Dubois, Pa. (Van Fleet), Lewiston Reservoir, Ohio (Fisher), Henderson, Ky. (Audubon), Lincoln, Nebr. (Coleman), San Luis Lakes, Colo. (Aiken), Salt Lake, Utah (Ridgway), and Escondido, Cal. (Sharp). A specimen which may have been breeding was taken May 18, 1886, at Pecks Lake, Ariz. (Mearns). The species once nested in Pamlico Sound, N. C. (Pearson), and strangely enough it was found nesting in 1904 at Lerma, Mexico (Goldman), more than 1,000 miles from the nearest previously known breeding grounds. It was also found in June at Tizimin in northern Yucatan (Sharpe), and may have been breeding.

Winter range.—The Virginia rail winters for the most part in the southern United States, occurring on the Gulf coast from Fort Myers, Fla. (Scott), to Corpus Christi, Tex. (Sennett), and south to Duenas, Guatemala—January, 1861—(Salvin), and San Jose del Cabo, Lower California (Brewster). It was found once—January, 1854—in the market of Habana, Cuba (Gundlach), and once—November 6, 1851—in the Bermudas (Hurdis). The species winters regularly and commonly on the coast of South Carolina (Wayne), less commonly or rarely north to Pea Island, N. C. (Bishop). It has been found casually in winter near Washington, D. C., December 28, 1912 (Adams); at Easton, Md., Jaunary 20, 1891 (Kirkwood); Cape May, N. J., December 30, 1895 (Stone); Trenton, N. J., January, 1869 (Abbott); Worcester, Mass., January 1, 1891 (Reed); and Barnstable, Mass., December 31, 1894 (Hoffmann). In the Mississippi Valley it remains as far north during the winter as Arkansas County, Ark. (Hollister),

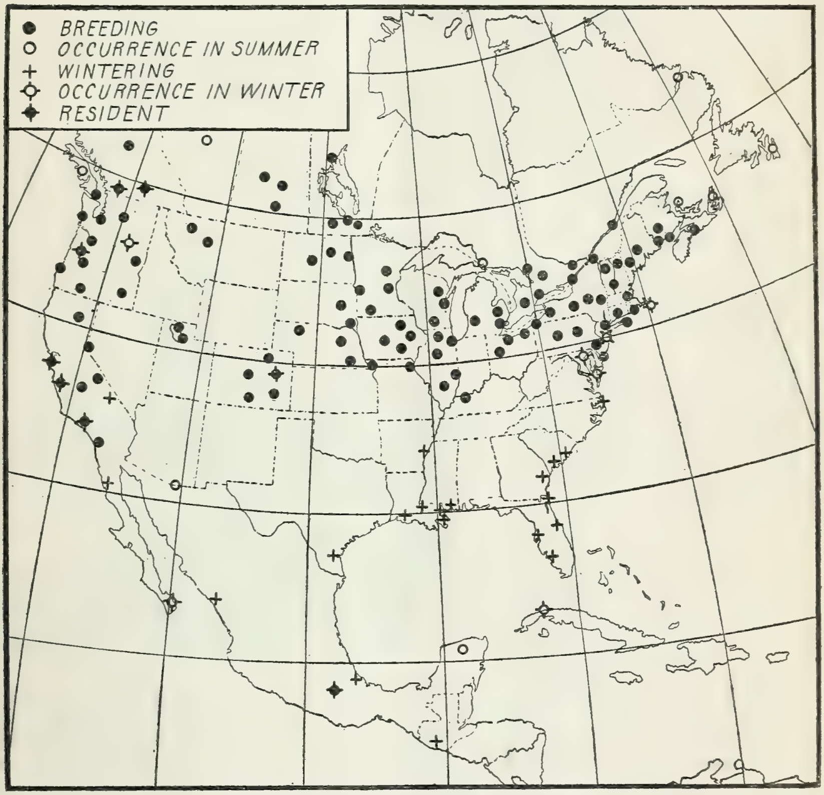

FIG. 10.—Virginia rail (*Rallus virginianus*).

and on the Pacific coast almost to the northern limit of its breeding range at Chilliwack, B. C. (Brooks), and Okanogan, B. C. (Brooks). There is an isolated winter colony at Barr Lake, Colo. (Hersey and Rockwell); one wintered at Colorado Springs in 1898–99 (Aiken); one at Boulder in 1909–10 (Betts); three at Helena, Mont., 1910–11 (Saunders); and several near Provo, Utah, 1911–12 (Goodwin). One was taken January 16, 1879, at Walla Walla, Wash. (Baird, Brewer, and Ridgway).

Spring migration.

Place.	Number of years' records.	Average date of spring arrival.	Earliest date of spring arrival.
Raleigh, N. C	3	Apr. 10	Apr. 7, 1900
Washington, D. C			Apr. 6, 1892
Baltimore, Md			Mar. 20, 1895
Erie, Pa			Apr. 18, 1900
Branchport, N. Y. (near)	10	Apr. 26	Apr. 7, 1905
Ithaca, N. Y			Apr. 24, 1904
Eastern Massachusetts	6	Apr. 25	Apr. 14, 1899
St. Louis, Mo			Mar. 31, 1887
Bowling Green, Ky			Apr. 6, 1902
Central Indiana	5	Apr. 20	Apr. 17, 1892
Chicago, Ill	10	Apr. 28	Apr. 16, 1907
Southern Wisconsin	9	Apr. 25	Apr. 19, 1896
Southwestern Ontario	5	Apr. 27	Apr. 23, 1889
Oberlin, Ohio	10	May 2	Apr. 15, 1907
Vicksburg, Mich	4	May 4	Apr. 27, 1904
Lincoln, Nebr			Apr. 28, 1900
Springfield, S. Dak			May 13, 1910
Grand Forks, N. Dak			May 14, 1903
Aweme, Man	2	May 16	May 10, 1896
Indian Head, Sask	3	May 23	May 19, 1910
Tucson, Ariz			Apr. 11, 1886
Fort Custer, Mont			May 11, 1885
Columbia Falls, Mont			May 16, 1894
Stony Plain, Alta			May 20, 1908

The latest dates of the Virginia rail in its winter home are: Savannah, Ga., April 3, 1908 (Hoxie); Charleston, S. C., April 5 (Wayne); Bayou Sara, La., April 15, 1882 (Beckham); and Bay St. Louis, Miss., April 19, 1902 (Allison).

Eggs have been found at Erie, Pa., May 26, 1891, and June 2, 1892 (Todd); Ithaca, N. Y., May 18, 1905 (Reed and Wright); Portland, Conn., May 23, 1894 (Sage); Framingham, Mass., May 17, 1890 (Coombs); Hampton, N. H., May 28, 1887 (Shaw); Elkhart County, Ind., May 19, 1890 (McBride); Oberlin, Ohio, May 8, 1903 (Jones); Detroit, Mich., May 25, 1891 (Swales); Iowa City, Iowa, May 29, 1884 (Clute); Cedar Rapids, Iowa, May 8, 1902 (Hathorn); Pewaukee, Wis., May 23, 1871 (specimens in U. S. National Museum); Boulder, Colo., May 28, 1904 (Henderson); Barr Lake, Colo., May 18, 1907–July 6 (Rockwell); Fort Crook, Cal., May 13, 1861 (specimens in U. S. National Museum); Walla Walla, Wash., April 26, 1882 (specimens in U. S. National Museum); and Tacoma, Wash., March 30, 1908 (Bowles). Eggs have been noted as late as July 19, 1903, at Odessa, Del. (Pennock), and young in the nest August 5, 1896, at Hartland, Me. (Knight).

Fall migration.

Place.	Number of years' records.	Average date of the last one seen.	Latest date of the last one seen.
Scotch Lake, N. B.			Sept. 23, 1900
Montreal, Canada			Oct. 23, 1897
Marlow, N. H			Oct. 1, 1881
Eastern Massachusetts	4	Sept. 22	Nov. 9, 1898
Hartford, Conn	3	Oct. 3	Oct. 9, 1895
Renovo, Pa	3	Sept. 28	Oct. 2, 1895
Erie, Pa			Oct. 28, 1893
Montauk, N. Y			Oct. 30, 1900
Ottawa, Ont	4	Oct. 6	Oct. 28, 1897
Circleville, Ohio			Nov. 23, 1880
Delavan, Wis	2	Oct. 15	Oct. 16, 1894
Vicksburg, Mich	4	Nov. 9	Nov. 17, 1903
Margaret, Man	2	Sept. 20	Sept. 21, 1911
White Earth, Minn			Sept. 15, 1880
Lake Andrew, Minn			Oct. 5, 1891
Fort Snelling, Minn			Nov. 11, 1890
Provo, Utah			Nov. 27, 1872
St. George, Utah			Nov. 3, 1909

The Virginia rail usually returns to southern Mississippi about September 15, earliest September 3, 1902; Washington, D. C., September 4, 1911; Raleigh, N. C., September 8, 1896; and South Carolina the last of September.

[SPOTTED RAIL. *Linnopardalus maculatus* (Boddaert).

The eastern coast of South America is included in the range of the spotted rail, from Paraguay and Argentina to Guiana, and to Colombia, with the islands of Trinidad and Tobago. The species reappears in Cuba, but there seems to be a long break in the range from Cuba to Colombia.]

[LAWRENCE WOOD RAIL. *Aramides axillaris* Lawrence.

The Lawrence wood rail is a species of wide distribution, ranging north on the Pacific side of Mexico to Mazatlan (Grayson), and quite common at San Blas, Tepic, June 12, 1897 (Nelson and Goldman); while on the Atlantic slope it was noted at Las Bocas de Silan (Cabot), and Mujeres Island, March 24, 1901 (Nelson and Goldman), both in northern Yucatan. It has also been taken at Acapulco, Guerrero, January 14, 1895 (Nelson and Goldman), and Belize (Bocourt). It seems to be very rare between southern Mexico and northern South America, though it has been found at Carrillo and Lepanto, Costa Rica (Carriker). It occurs on the northern coast of South America from Barranquilla, Colombia, to Venezuela, Trinidad Island, and British Guiana.]

[CAYENNE WOOD RAIL. *Aramides cajanea* (Müller).

The Cayenne wood rail ranges from eastern and central Brazil to Peru and north to British Guiana and Colombia. It is a common species in Panama and extends along both coasts to northern Costa Rica.]

[MANGROVE WOOD RAIL. *Aramides albiventris* Lawrence.

The Mangrove wood rail has a wide distribution on the eastern side of Mexico north to Alta Mira and is abundant in favorable localities along the coast of Vera Cruz and east to Cozumel Island, Yucatan; Belize; and Omoa and San Pedro, Honduras. It is also common on the Pacific side from the coast of Guatemala west to Huilotepec and Guichicovi, Oaxaca.]

[NICARAGUA WOOD RAIL. *Aramides plumbeicollis* Zeledon.

The range of the Nicaragua wood rail is along the coast of Nicaragua and north to the Segovia River, eastern Honduras, and south in northeastern Costa Rica to the foothills of the Volcano Turrialba.]

[RED RAIL. *Amaurolimnas concolor* (Gosse).

Little is known of the distribution of the red rail. It was originally described from Jamaica and has since been recorded from Guatemala, Honduras, Nicaragua, Guiana, and Brazil.]

SPOTTED CRAKE. *Porzana porzana* (Linnaeus).

Several specimens of the spotted crake have been taken in the fall on the western coast of Greenland at Godthaab, Nanortalik, and Julianehaab. All were wanderers beyond the normal range of the species, which includes nearly all of Europe north to latitude 65° and east in Asia to Yarkand, Turkestan. The species winters in southern Asia and in Africa.

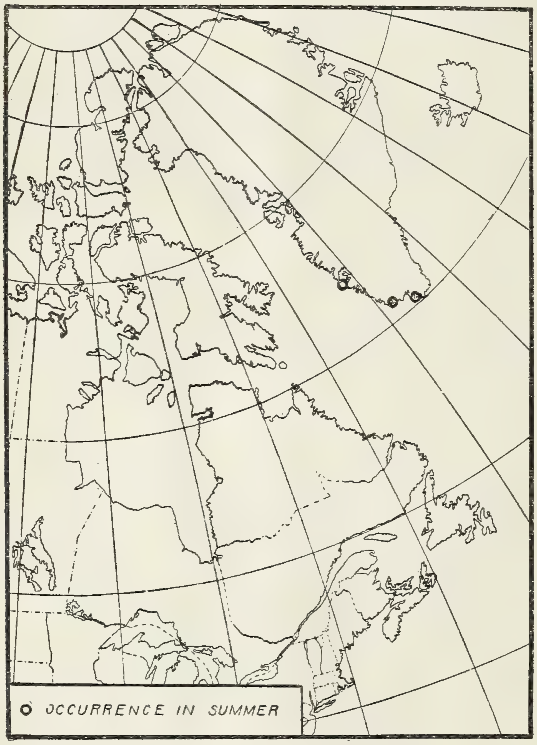

FIG. 11.—Spotted crake (*Porzana porzana*).

SORA. *Porzana carolina* (Linnaeus).

Range.—North America, north to central British Columbia, southern Mackenzie, and the Gulf of St. Lawrence; thence south through the West Indies and Central America to Venezuela and Peru.

Breeding range.—The sora, or, as it is often called, the Carolina rail, breeds throughout northern United States and north to Grand Manan Island, N. B. (Osgood), Prince Edward Island (Bagster), Godbout, Que. (Comeau), Moose Factory, Ont. (Spreadborough), Fort Churchill, Keewatin (Clarke), Fort Rae, Mackenzie (Baird, Brewer, and Ridgway), Fort Simpson, Mackenzie (Preble), Cariboo District, B. C. (Brooks), and Victoria, B. C. (Rhoads). The species has also been noted as a wanderer north to Nova Scotia (Willis), Newfoundland (Reeks), Harrington, Que., July, 1907 (Townsend), Sandwich Bay, Que., 1898 (Townsend and Allen), Massett, B. C. (Keen), and Sukkertoppen, Greenland, October 3, 1823 (Reinhardt); several other specimens are reported from the west coast of Greenland, the most northern of which is from Umanak, latitude 70° (Schalow).

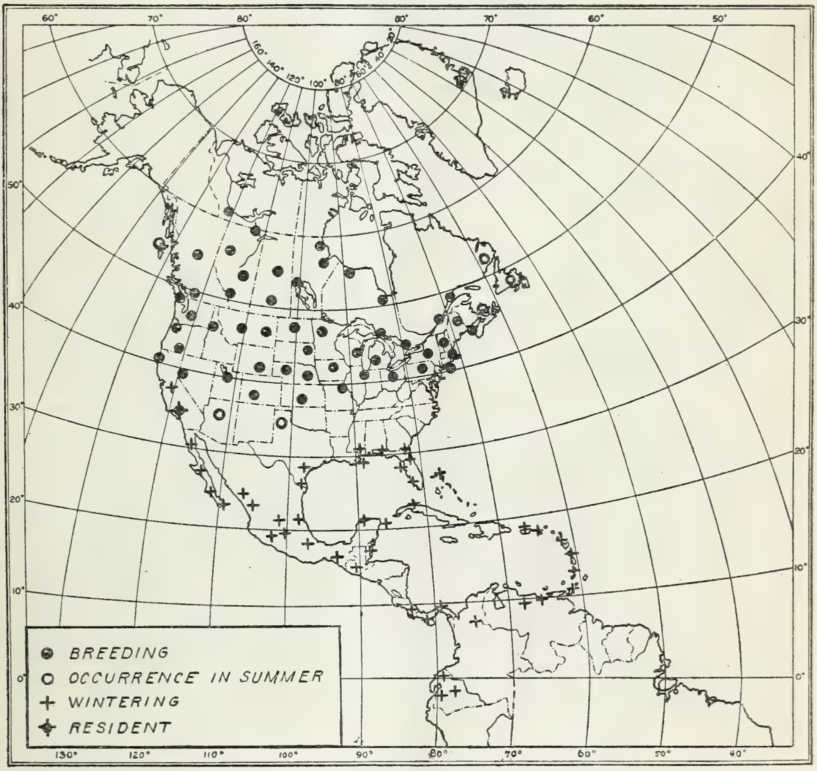

FIG. 12.—Sora, or Carolina rail (*Porzana carolina*).

The breeding range extends south to Philadelphia, Pa. (Audubon), Warren, Ohio (Dana), Lewiston Reservoir, Ohio (Fisher), Philo, Ill. (Hess), Independence, Mo. (Widmann), Osawatomie, Kans. (Colvin), near Breckenridge, Colo. (Carter), Utah Lake, Utah (Johnson), Pyramid Lake, Nev. (Ridgway), and Escondido, Cal. (Hatch).

Winter range.—The flight of the sora is slow and labored (see p. 4). but some individuals travel more miles between the summer and winter homes than almost any other rails in the Western Hemisphere. The birds breeding in the Mackenzie Valley do not winter farther north than the Gulf coast and hence must travel at least 2,500 miles during their fall migration. The species passes in winter to about latitude 5° S., and as none of these South American birds nest south of latitude 35° N. the migration route can not possibly be shorter than 3,000 miles and may be much longer.

The sora is dispersed in winter throughout the Greater and the Lesser Antilles and must take long flights over water in passing from one island to another. Moreover, the species is common in winter in northern Yucatan, and these individuals undoubtedly fly back and forth over the Gulf of Mexico, making a distance of at least 500 miles in a single flight.

The sora winters in Mexico, Central America, the West Indies, and northwestern South America, south to Tumbez, Peru (Taczanowski), and east to Medellin, Colombia (Sclater and Salvin), Lake Valencia, Venezuela (Sclater and Salvin), Caracas, Venezuela (Ernst), and to the island of Trinidad (Sharpe), and Tobago Island (Jardine). It also winters in the northern Bahamas (Bonhote), Bermuda (Hurdis), and in Florida north to Amelia Island (Worthington) and Whitfield (Worthington). It is rather common in winter along the coasts of Mississippi, Louisiana, and Texas, in Lower California, and in western California north to Marysville (Belding).

Stragglers have been seen in winter far north of the regular range at this season, at Canton, Md., December 26, 1890, and January 22, 1895 (Kirkwood); Rochester, N. Y., December 12, 1882 (Coues); Seaford, N. Y., December 24, 1908 (Braislin); Hartford, Conn., December 29, 1881; Salem, Mass., about December 22, 1874 (Newcomb); Rantoul, Ill., December 27, 1910 (Ekblaw); Lanesboro, Minn., January 25, 1894 (Hvoslef); and Pecks Lake, Ariz., January 24, 1887 (Mearns).

Spring migration.

Place.	Number of years' records.	Average date of spring arrival.	Earliest date of spring arrival.
Cumberland, Md			Mar. 7, 1902
Kirkwood, Ga			Mar. 31, 1896
Otranto, S. C			Feb. 3, 1909
Mount Pleasant, S. C			Mar. 4, 1895
Raleigh, N. C	5	Apr. 19	Apr. 6, 1886
Erie, Pa	3	May 4	Mar. 31, 1902
Lockport, N. Y. (near)	8	Apr. 30	Apr. 22, 1890
Hartford, Conn			Apr. 18, 1888
Quonochontang, R. I			Mar. 2, 1900
Cambridge, Mass			Apr. 23, 1897
Pittsfield, Me	3	May 16	May 14, 1899
Quebec City, Canada			May 27, 1892

Spring migration—Continued.

Place.	Number of years' records.	Average date of spring arrival.	Earliest date of spring arrival.
Petitcodiac, N. B			May 17, 1888
Bowling Green, Ky	2	Apr. 16	Apr. 5, 1902
Kansas City, Mo	2	Apr. 18	Apr. 17, 1902
Chicago, Ill	11	Apr. 19	Apr. 11, 1896
New Bremen, Ohio			Apr. 19, 1909
Oberlin, Ohio	11	May 2	Apr. 22, 1907
Ann Arbor, Mich	6	May 3	Apr. 13, 1908
Vicksburg, Mich	6	Apr. 19	Apr. 11, 1904
Toronto, Ont	3	May 6	Apr. 23, 1891
Ottawa, Ont	6	May 11	May 8, 1910
Sioux City, Iowa			Apr. 20, 1902
Keokuk, Iowa	6	Apr. 21	Apr. 16, 1893
Madison, Wis	6	May 2	Apr. 19, 1908
La Crosse, Wis	6	May 3	Apr. 20, 1906
Heron Lake, Minn	5	May 5	Apr. 21, 1889
Minneapolis, Minn	9	May 1	Apr. 25, 1889
White Earth, Minn	2	May 6	May 4, 1882
Gainesville, Tex			Apr. 8, 1885
Onaga, Kans	3	May 5	Apr. 29, 1893
Badger, Nebr	4	May 10	May 7, 1886
Northern North Dakota	5	May 14	May 3, 1908
Aweme, Man	8	do	Apr. 30, 1902
Indian Head, Sask	5	May 17	May 12, 1906
Fort Simpson, Mackenzie			May 19, 1904
Tucson, Ariz			Apr. 18, 1886
Boulder, Colo			May 8, 1910
Jackson, Wyo			Apr. 26, 1911
Terry, Mont			May 9, 1906
Edmonton, Alta	2	May 11	May 10, 1903
Grapevine Spring, Cal			Apr. 1, 1891
Fort Klamath, Oreg			Mar. 28, 1887
Chilliwack, B. C	2	Apr. 11	Apr. 9, 1889
Okanogan Landing, B. C			Apr. 26, 1906

The sora has been found at Swan Island, Honduras, as late as March 25, 1887 (Ridgway); Lake Amatitlan, Guatemala, March 9, 1906 (Dearborn); Isla de los Pajaros, Vera Cruz, April 20, 1904 (Sheldon); Alta Mira, Tamaulipas, April 12, 1898 (Goldman); St. Croix Island, West Indies, April 24, 1858 (Newton); Bermuda, April 26, 1849 (Jardine); Sombrero Key Lighthouse, Fla., April 19, 1887 (Marshall); Whitfield, Fla., May 7, 1903 (Worthington); Cumberland, Ga., April 15, 1902 (Helme); Charleston, S. C., May 14, 1910 (Chamberlain); Kirkwood, Ga., May 12, 1897 (Smith); Raleigh, N. C., average May 13, latest May 18, 1888 (Brimley); Cumberland, Md., May 30, 1901 (Eifrig); Hester, La., April 23, 1902 (Pring); Bay St. Louis, Miss., April 20, 1902 (Allison); Bellevue, Tenn., May 20, 1895 (Rhoads); and Hidalgo, Tex., May 20, 1889 (Sennett).

Eggs of the sora were secured at Erie, Pa., May 25, 1892 (Todd); State College, Pa., June 7, 1909 (Harlow); Mount Holly, N. J., June 2, 1871 (specimens in U. S. National Museum); Stamford, Conn., May 12, 1897 (Howes); Ponkapog, Mass., May 29, 1895 (Bowles); Montreal, Canada, June 8, 1889 (Wintle); Waterloo, Ind., May 16, 1890 (McBride); Plymouth, Mich., May 19, 1889 (Purdy); Bay City, Mich., May 25, 1892 (Eddy); Ottawa, Ont., June 18, 1900 (Dawson); Forest, Iowa, May 30, 1893 (Anderson); Horicon, Wis., May 26, 1882

(Goss); Pitrodie, S. Dak., June 1, 1888 (Cheney); Reaburn, Man., June 4, 1893 (Dippie); Long Lake, Man., June 7, 1894 (Arnold); Crane Lake, Sask., June 9, 1894 (Macoun); Big Quill Lake, Sask., June 12, 1909 (Ferry); Terry, Mont., June 18, 1898 (Cameron); Lake Valley, Cal., May 31, 1910 (Ray); Fort Klamath, Oreg., May 27, 1887 (Merrill); and downy young at Fort Keogh, Mont., June 8, 1889 (Thorne).

Fall migration.—In the Mississippi Valley the number of sora is probably greater than along the Atlantic coast, yet the marshes are so numerous and extensive that sora never congregate in small areas in such enormous numbers as in favorable localities on the coast.

Fall migration.

Place.	Number of years' records.	Average date of fall arrival.	Earliest date of fall arrival.
Pachaco, Chihuahua	......	......	Aug. 11, 1905
La Barca, Jalisco	......	......	Aug. 17, 1903
Negrete, Michoacan	......	......	Sept. 10, 1903
Bermuda	......	......	Aug. 31, 1847
Canaveral, Fla	......	......	Sept. 16, 1889
Ways Station, Ga	......	......	Aug. 25, 1886
Sullivans Island, S. C	......	......	Aug. 14, 1910
Raleigh, N. C	4	Sept. 2	Aug. 21, 1894
Washington, D. C	14	Aug. 13	Aug. 3, 1899
Diamond, La	......	......	Sept. 1, 1897
Bay St. Louis, Miss	3	Sept. 8	Aug. 23, 1899
Monteer, Mo. (near)	2	Sept. 8	Sept. 4, 1902
Brownsville, Tex	......	......	Sept. 18, 1888
Fort Verde, Ariz	......	......	Sept. 3, 1886

Place.	Number of years' records.	Average date of the last one seen.	Latest date of the last one seen.
Indian Head, Sask	......	......	Oct. 25, 1904
Aweme, Man	6	Sept. 6	Oct. 3, 1907
Ottawa, Ont	......	......	Oct. 30, 1895
Point Pelee, Ont	......	......	Oct. 14, 1909
Godbout, Que	3	Aug. 19	Sept. 14, 1891
Montreal, Canada	4	Sept. 30	Oct. 7, 1893
Southern Maine	3	Oct. 7	Oct. 26, 1904
North Truro, Mass	......	......	Oct. 20, 1889
Newport, R. I	5	Oct. 10	Nov. 10, 1899
Erie, Pa	4	Oct. 21	Oct. 25, 1894
Ossining, N. Y	2	Oct. 14	Oct. 16, 1885
Washington, D. C	5	Oct. 19	Nov. 9, 1878
Raleigh, N. C	4	Oct. 15	Oct. 30, 1891
Kirkwood, Ga	......	......	Oct. 14, 1898
Keokuk, Iowa	3	Oct. 10	Nov. 19, 1893
Delavan, Wis	3	Oct. 13	Oct. 22, 1896
Topeka, Kans	......	......	Oct. 18, 1902
Badger, Nebr	......	......	Oct. 23, 1899
Sioux Falls, S. Dak	......	......	Oct. 17, 1909
Antler, N. Dak	......	......	Oct. 12, 1908
Terry, Mont	3	Sept. 12	Oct. 17, 1908
St. George, Utah	......	......	Nov. 3, 1909
Palmer, Mich	......	......	Oct. 6, 1894
Neebish Island, Mich	......	......	Nov. 9, 1893
Vicksburg, Mich	7	Oct. 6	Nov. 17, 1902
Oberlin, Ohio	......	......	Oct. 23, 1896
Brookville, Ind	......	......	Oct. 14, 1890
Chicago, Ill	6	Oct. 11	Oct. 17, 1897

[MEXICAN YELLOW RAIL. *Porzana goldmani* Nelson.

The Mexican yellow rail is known only from the type specimen taken by Goldman, July 11, 1904, at Lerma, Mexico.]

[YELLOW-BELLIED RAIL. *Porzana flaviventris* (Boddaert).

The distribution of the yellow-bellied rail is rather peculiar. It is known in South America from Guiana to southern Brazil, but though not yet recorded from Central America nor from the rest of the Greater Antilles, it is not infrequent in Jamaica and Cuba.]

[RUFOUS RAIL. *Porzana rubra* Sclater and Salvin.

Recorded many years ago from British Honduras, the lower parts of Guatemala south to Duenas, and from Cozumel Island, Yucatan, the known range of the rufous rail was extended in February, 1901, to Tlacotalpam, Vera Cruz (Smith), and on April 25, 1904, by Sheldon and Piper, to Isla de los Pajaros, near Tampico, Vera Cruz.]

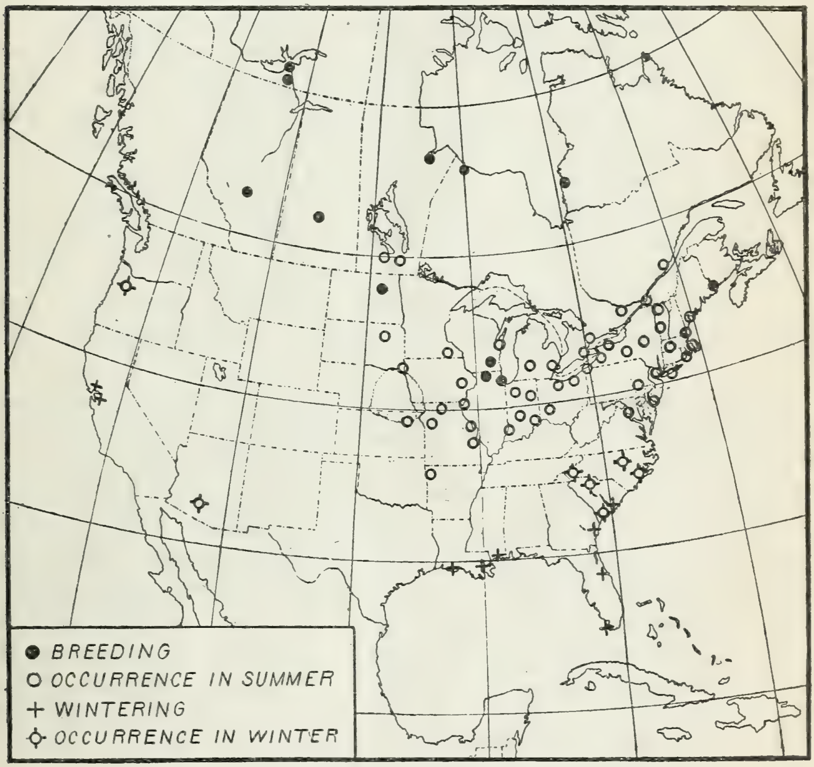

FIG. 13.—Yellow rail (*Coturnicops noveboracensis*).

YELLOW RAIL. *Coturnicops noveboracensis* (Gmelin).

Range.—North America from central Canada to the Gulf coast.

Breeding range.—There seem to be only a few sets of eggs of the yellow rail in museums or collections. Hence the breeding range of the species has to be inferred from its occurrence in summer. At this season it has been noted north to Fort George, Que. (Bell), York Factory, Keewatin (Preble), and Fort Resolution, Mackenzie (Preble); and west to Red Deer, Alta. (Saunders). It has been seen during the summer south to Calais, Me. (Boardman), Winnebago, Ill. (Coues), Jefferson County, Wis. (Kumlien and Hollister), and in Minnesota (Roberts).

Winter range.—The yellow rail winters on the Gulf coast from Sandy Key, Fla. (Audubon), to Vermilion Bay, La. (McAtee); and north on the Atlantic coast to Charleston, S. C. (Wayne). Individuals have been taken casually in winter much farther north to Newbern, N. C., February, 1892 (Brimley); Sayville, N. Y., January 17, 1894 (Eaton); and Seaford, N. Y., December 4, 1908, and January 10, 1909 (Peavey). The species also has the remarkable record of appearing on the Pacific coast in winter. It does not breed anywhere west of the Rocky Mountains, but a few individuals seem to cross the mountains in migration and have been noted at Scio, Oreg., February 1, 1900 (Prill); Humboldt Bay, Cal., 1884 (Townsend); Sonoma, Cal., December 20, 1898 (Carriger); Point Reyes, Cal., November 19, 1900 (Mailliard); Cordelia, Cal. (Bryant); Martinez, Cal. (Cooper); Alameda, Cal., November 7, 1900 (Cohen); Alvarado, Cal., December 28, 1883 (Bryant); Alameda County, Cal., fall of 1897 (Kaeding); San Mateo County, Cal., November, 1897 (Taylor); Berryessa, Cal. (Beck); and Sacaton, Ariz., March 28, 1909 (Gilman).

Spring migration.—The spring advance occupies nearly two months, from late March to the middle of May. Yellow rails arrived at Fort Macon, N. C., April 12, 1871 (Coues); Washington, D. C., March 28, 1884, and April 14, 1893 (Palmer); Erie, Pa., April 23, 1904 (Todd); Princeton, N. J., April 10, 1895 (Phillips); Oakdale, N. Y., April 29, 1887 (Dutcher); Murray, N. Y., April 21, 1894 (Posson); Bridgeport, Conn., March 24, 1888 (Averill); Wakefield Meadows, Mass., May 9, 1888 (Webster); Dedham, Mass., May 26, 1906 (McKechnie); St. Louis, Mo., March 27, 1876 (Widmann); Lebanon, Ill., April 5, 1877 (Jones); Chicago, Ill., April 12, 1888 (Woodruff); Detroit, Mich., March 25, 1908 (Taverner); Lake Maxinkuckee, Ind., March 22, 1901 (Evermann); Kankakee Marsh, Ind., April 2, 1885 (Perry); Toronto, Ont., April 24, 1899 (Fleming); Two Rivers, Wis., May 22, 1890 (Fisher); Elk River, Minn., May 14, 1885 (Bailey); Lake Wilson, Minn., May 13, 1909 (Peters); Lawrence, Kans., April 18, 1885 (Goss); and Lincoln, Nebr., April 30, 1909 (Zimmer).

The species has been noted at Darien, Ga., as late as March 29, 1890 (Worthington), and at Bay St. Louis, Miss., until April 21, 1902 (Allison).

Eggs have been taken at Winnebago, Ill., May 17, 1863, and near Devils Lake, N. Dak., June 4, 1901, June 8, 1903, and June 9, 1910.

Fall migration.—The first yellow rails returned to Chester, S. C., September 3, 1887 (Loomis); Erie, Pa., September 15, 1901 (Todd); Charlestown, R. I., September 26, 1886 (Glezen); Newton, Mass., September 8, 1868 (Baird, Brewer, and Ridgway); Toronto, Ont., August 5, 1896 (Fleming); near Burlington, Iowa, September 9, 1898 (Bartsch); Lanesboro, Minn., September 1, 1886 (Hvoslef); Biloxi, Miss., November 19, 1903 (Brodie); and Bermuda, October, 1847 (Hurdis).

The last were reported from Portland, Me., October 1, 1905 (Norton); Seabrook, N. H., October 15, 1871 (specimen in U. S. National Museum); Canton, Mass., October 15, 1872 (Purdie); near New Haven, Conn., November 10, 1876 (Merriam); Buffalo, N. Y., October 11, 1907 (Eaton); Far Rockaway, N. Y., October 15, 1883 (Lawrence); Salem, N. J., October 24, 1908 (McKee); Erie, Pa., October 29, 1901 (Todd); Prince George County, Md., November 3, 1880 (Kirkwood); Washington, D. C., November 17, 1893 (Palmer); Lanesboro, Minn., September 24, 1891 (Hvoslef); Delavan, Wis., October 13, 1901 (Hollister); Kalamazoo, Mich., October 19, 1890 (Gibbs); Toronto, Ont., October 15, 1895 (Nash); Ottawa, Ont., October 22, 1895 (White); and Lawrence, Kans., October 1, 1885 (Kellogg).

BLACK RAIL. *Creciscus jamaicensis* (Gmelin).

Range.—North America from Kansas, southern Ontario, and Massachusetts, to Jamaica and Guatemala.

Breeding range.—The black rail breeds throughout the northern half of its range in the United States; it is not only the rarest rail in this district, but is also so secretive that even when present it is seldom seen, and hardly more than a dozen nests have ever been found. It occurs in summer from Mount Pleasant, S. C. (Wayne), Weaverville, N. C. (Cairns), Philo, Ill. (Hess), and Garden City, Kans. (Kellogg), north to Chatham, Mass. (Allen), Dundas, Ont. (Nash), Calumet, Ill. (Nelson), Fort Dodge, Iowa (Somes), and Beloit, Kans. (Goss). It has been taken also north to Lake Koshkonong, Wis., August 20, 1877 (Kumlien and Hollister), Westpoint, Nebr. (Bruner), and Denver, Colo. (Bruce).

Winter range.—The black rail winters in Guatemala (Salvin), and occurs in Jamaica from August to February and rarely to April (Scott). There seems to be no sure record of its wintering anywhere in the United States.

Spring migration.—The species was noted in the spring at Key West, Fla., March 11, 1890 (Scott); Warrington, Fla., March 22–26, 1885 (Stone); Mosquito Inlet, Fla., May 9, 1902 (Gane); Washington, D. C., May 29, 1891 (Brown), and June 6, 1879 (Baird, Brewer, and Ridgway); Milton Hill, Mass., May 16, 1904 (Cobb); Canton, Ill., April 15, 1895 (Cobleigh); Bicknell, Ind., May 1, 1907 (Chansler);

Carthage, Ohio, May 17, 1890 (Drury); southeastern Texas, April 29, 1879 (Nehrling); and Neosho Falls, Kans., March 18, 1886 (Goss).

Fall migration.—During the fall the black rail has visited the Bermudas, September 5, 1848 (Hurdis); Mount Pleasant, S. C., October 17, 1891. and November 9, 1906 (Wayne); Piscataway Creek, Md., September 25, 1877 (Palmer); Mount Calvert, Md., October 19, 1906, September 22, 1907, and October 12, 1908 (Palmer); Washington, D. C., September 1, 1908 (Palmer); Camden, N. J., September 22, 1887 (Sherratt); Canton, Ill., October 27, 1894 (Cobleigh); Chicago, Ill., October 15, 1903 (Dearborn); Lawrence, Kans., September 26, 1885 (Kellogg); and Habana, Cuba, twice (Gundlach).

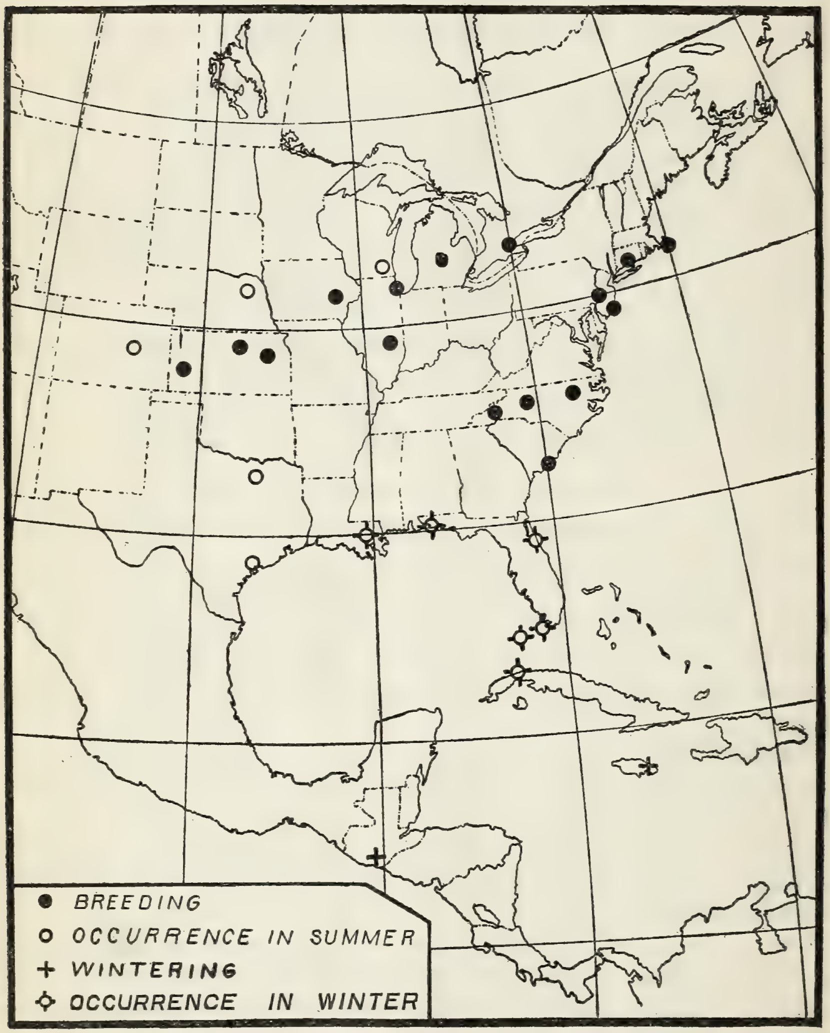

FIG. 14.—Black rail (*Creciscus jamaicensis*).

Eggs have been found at Mount Pleasant, S. C., June 10, 1903 (Wayne); Raleigh, N. C., May 26, 1890, to August 10, 1898 (Stone); Saybrook, Conn., July 10, 1876 (Purdie); Great Island, Conn., June 6, 1884 (Clark); Calumet Marsh, near Chicago, Ill., June 19, 1875 (Nelson); Philo, Ill., May 30, 1901 (Hess); and Garden City, Kans., June 6, 1889 (Kellogg). Young not long from the nest were found near Philadelphia, Pa., July 22, 1836 (Allen).

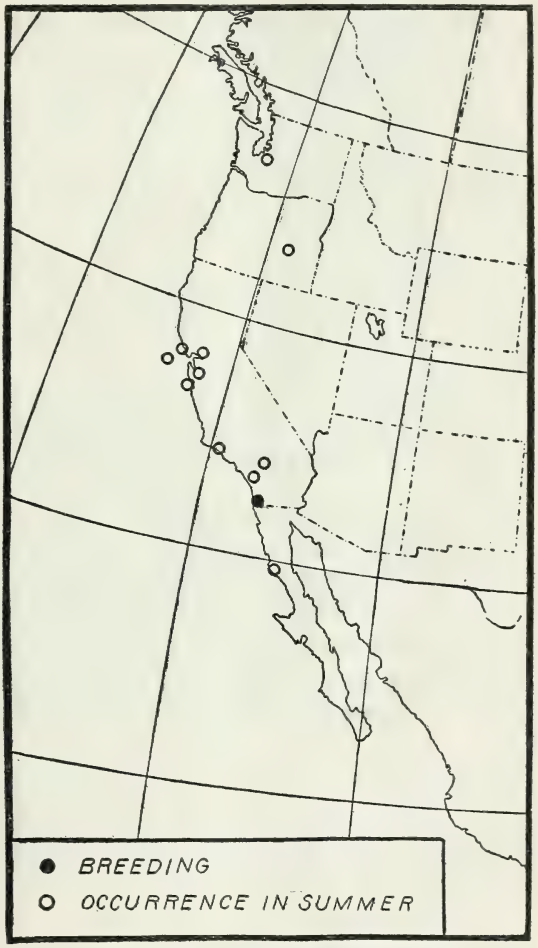

FIG. 15.—Farallon rail (*Creciscus coturniculus*).

FARALLON RAIL. *Creciscus coturniculus* (Ridgway).

Knowledge of the life history of the Farallon rail is only fragmentary. The species has been found nesting in a marsh near National City, Cal. (Stephens), and apparently this is the only place where eggs have actually been collected. The nesting season extends from the middle of March to early May (Ingersoll).

The species is somewhat common in late fall in the marshes around San Francisco Bay and especially near Point Reyes (Brewster); it has been noted there from October (October 12, 1899) to December (December 1, 1892) and may possibly winter there, as one was seen February 29, 1892 (Beck), and one at Redwood City February 2, 1897 (Thayer). At their breeding grounds near San Diego they have been recorded from March to June 22 and from November 16 to December (Stephens). Other California dates are: Riverside, August 13, 1892 (Miller); Orange, December 12, 1896 (Grinnell); and Ballona Marsh, Los Angeles County, May 16, 1895 (Grinnell). The species has wandered into Washington—Tacoma, November 10, 1900 (Bowles); it was probably seen by Bendire at Malheur Lake, Oreg.; and one was taken August 31, 1905, at San Quintin, Lower California (Nelson and Goldman). Eggs have been taken in the vicinity of San Diego Bay, April 21, 1908 (Thayer); May 4, 1908 (Ingersoll); and April 7, 1910 (Thayer).

Should it be ascertained that this rail winters near San Francisco Bay and does not breed there, the species would be unique among United States birds as wintering north of the breeding grounds.

[**ASH-HEADED RAIL.** *Creciscus cinereiceps* (Lawrence).

The ash-headed rail occupies most of eastern Costa Rica and the southern half of eastern Nicaragua. Its known range was extended in 1911 by E. A. Goldman, of the Biological Survey, through the capture of a specimen at Lion Hill, Panama.]

[**WHITE-THROATED RAIL.** *Creciscus albigularis* (Lawrence).

Originally described from Panama, the white-throated rail has been recorded south to Remedias, Colombia, and north along the Pacific coast to Las Trojas and La Barranca, Costa Rica.]

[**WANDERING RAIL.** *Creciscus exilis vagans* (Ridgway).

The wandering rail has been obtained on the Segovia River, Honduras, and the Escondido River, Nicaragua. The type species occurs in northern Brazil, Guiana, and Trinidad Island.]

CORN CRAKE. *Crex crex* (Linnaeus).

Range.—Eastern Hemsiphere; casual in Greenland and to the United States.

The coast of Greenland has received several visits from the corn crake, its range here extending on the west side to Egedesminde in Disco Bay, and south to Julianehaab; and on the eastern coast it has been noted at Angmagsalik and Tasicasak. It was once taken in Bermuda—October 25, 1847 (Reid); Hursley, Md., November 28, 1900 (Laurent); Salem, N. J., fall of 1854 (Cassin); near Bridgeton, N. J., June, 1856 (Krider); Dennisville, N. J., November 11, 1905 (Stone); Oakdale, N. Y., November 2, 1880 (Dutcher); Green Island, N. Y., November 6, 1883 (Park); near Amagansett, N. Y., about August 15, 1885 Dutcher); Montauk Point, N. Y., about November 1, 1888 (Dutcher); Saybrook, Conn., October 20, 1887 (Clark); Cranston, R. I., 1857 (Howe and Sturtevant); Falmouth, Me., October 14, 1889 (Brock); Pictou, N. S., about October, 1874 (McKinlay); and Newfoundland, about 1859 (Jones). Thus there are at least 14 records of the corn crake in North America south of Greenland, all but one of them in the fall.

The species ranges across Europe and Asia east to the valley of the Yenesei, and to Maskat, Arabia. It winters in Africa.

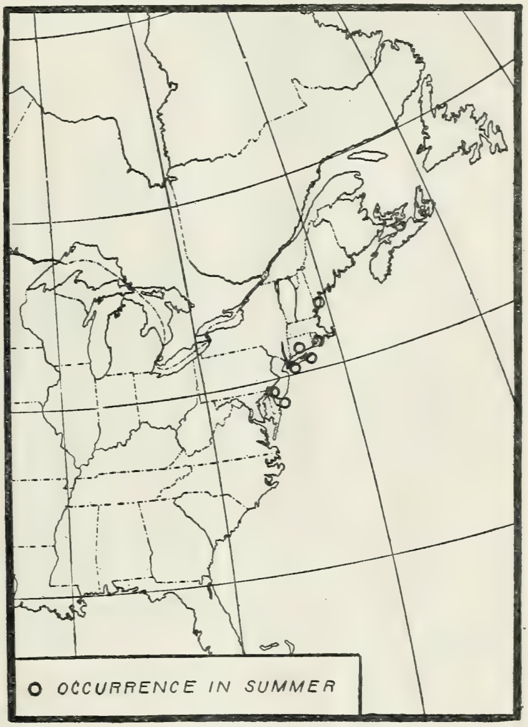

FIG. 16.—Corn crake (*Crex crex*).

PURPLE GALLINULE. *Ionornis martinicus* (Linnaeus).

Range.—Tropical and subtropical America; north regularly to southern United States; casually to southern Canada; south through the West Indies and Central America to Ecuador and Paraguay.

The real home of the purple gallinule is in Middle America, the West Indies, and South America. In the latter country the species extends south to Iguape, Brazil (Ihering); Buenos Aires, Argentina (Dabbene); and Androas, Ecuador (Sharpe). It is common in the Lesser and Greater Antilles and throughout Middle America west to San Blas, Tepic (Lamb), to the Rio de Coahuana, Colima (Lawrence), and

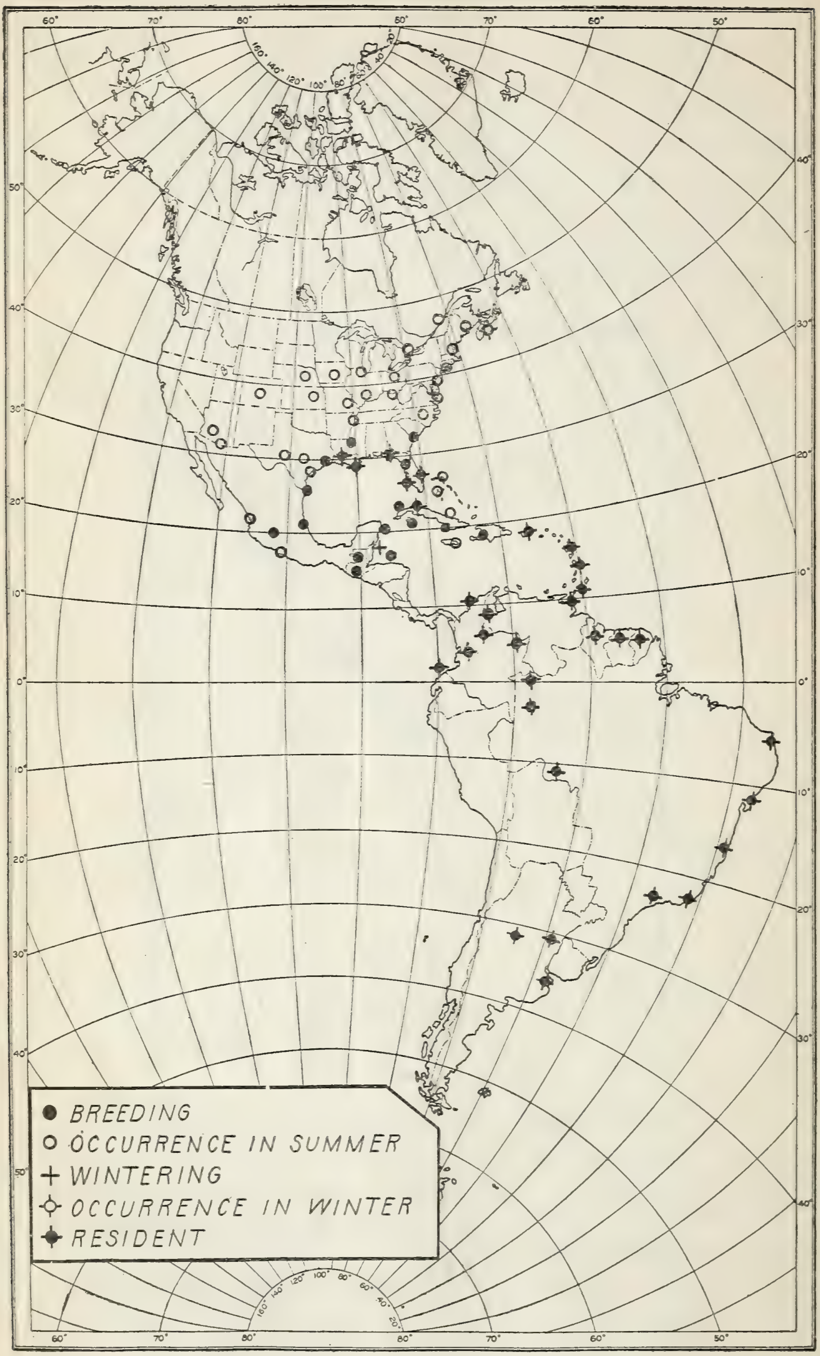

FIG. 17.—Purple gallinule (*Ionornis martinicus*).

to La Barca, Jalisco (Goldman). Throughout this great region it seems to be either resident or so slightly migrant that its movements can not be traced.

To the northward it has occurred a few times in Bermuda—May 30 and October 22, 1851 (Hurdis); and in the Bahamas, according to Bonhote, has been taken at Cay Lobos, October 19, 1900, Cay Sal, April 24, 1901, and February 9, 1902, and Mangrove Cay, December 16, 1901. It is resident in Florida and thence along the Gulf coast to Texas and eastern Mexico. Along the Atlantic coast it nests regularly north to Charleston, S. C. (Wayne), but withdraws in winter to Florida, where it is known at this season north to Tallahassee (Williams). It breeds up the Mississippi River to Natchez, Miss. (Audubon), but seems to retire to the Gulf coast for the winter.

The purple gallinule is a great wanderer and has been taken in the spring at Rockport, Mass., April 12, 1875 (Whitman); Randolph, Mass., May 24, 1904 (Thayer); South Lewiston, Me., April 11, 1897 (Knight); near St. John, N. B., April 6, 1881 (Brewster); Halifax, N. S., April, 1889 (Piers); St. Charles, Mo., April 22, 1877 (Widmann); in Illinois near St. Louis, Mo., April 18, 1877 (Allen); Coal City, Ill., April 24, 1900 (Deane); Willington, Ill., April 26, 1909 (Deane); near Chicago, Ill., May, 1866 (Nelson); Sandusky, Ohio, April 28, 1896 (Moseley); near Toronto, Ont., April 8, 1892 (Nash); Janesville, Racine, and Milwaukee, Wis. (Kumlien and Hollister); Blackhawk, Iowa (Peck); Huntsville, Tex., April 26, 1909 (Thomason); Manhattan, Kans., April 14, 1893 (Lantz); Westpoint, Nebr. (Bruner); Tombstone, Ariz., June, 1904 (Willard); and Florence, Colo., June 17, 1911 (Doertenbach).

The latest dates in the fall north of the breeding grounds are at Quebec City, Canada, middle of September, 1909 (Dionne); Mount Desert Island, Me., November 7, 1899 (Swain); Stoneham, Mass., November 27, 1837 (Peabody); Sandusky, Ohio, September 2, 1894 (Tuttle); Waverly, Ohio, November 16, 1898 (Henninger); Fredericksburg, Tex., September 18, 1894 (Grasso); and Tucson, Ariz., October 20, 1887 (Brown). There are also the strange records of single birds found at Halifax, N. S., January 30, 1870 (Jones), and January 16, 1896 (Piers).

At the southern limit of the purple gallinule's range in Brazil the eggs are laid in November (Euler), and at Santiago del Estero, Argentina, a set was taken December 28, 1905 (Hartert and Venturi); in Cuba eggs are found most commonly in June and July (Gundlach); while in the United States the breeding season is long extended, since eggs are in the U. S. National Museum, collected at Avery, La., April 15, 1894, while downy young were taken at Yemassee, S. C., September 17, 1887 (Wayne).

FLORIDA GALLINULE. *Gallinula galeata* (Lichtenstein).

Range.—North and South America; north to California, Minnesota, and Quebec; south through the West Indies and Central America to Chile and Argentina.

Breeding range.—The Florida gallinule has a wide distribution in the Western Hemisphere, breeding throughout the West Indies and in South America south to La Concepcion, Chile (Gould and Darwin), and to Buenos Aires, Argentina (White). It is almost entirely absent from northwestern Colombia and the whole of Panama and Costa Rica, but is common in favorable localities of the rest of Middle America north to Tepic and Mazatlan (Lawrence), and to Brownsville, Tex.

The summer distribution in the United States is peculiar, comprising three distinct areas. The largest area occupies the district from the Ohio River and the mouth of the Delaware north to Provincetown, Mass. (Small), St. Albans, Vt. (Woodworth), Montreal, Canada (Wintle), Toronto, Ont. (Nash), Lansing, Mich. (Cole), Kelley Brook, Wis. (Schoenebeck), and Minneapolis, Minn. (Moore); and west to Valentine and North Platte, Nebr. (Bruner, Wolcott, and Swenk). The second area includes Florida and the Gulf coast west to Louisiana and north to Rodney, Miss. (Mabbett), and to Charleston, S. C. (Wayne) This Florida area connects southward with Cuba and the Greater Antilles, where the species is common, but to the eastward in the Bahamas the bird seems to be rare and local, though it has been recorded at Nassau (Bonhote), Watlings (Todd), and at Inagua (Cory). It breeds rarely in Bermuda, and additional migrants appear there in the fall (Reid). The remaining area is western California from Escondido (Sharp) to Sacramento (Ridgway).

Each of these three areas is separated from its nearest neighbor by several hundred miles in which the species is rare or unknown. Between the first and second is an isolated breeding colony at Lake Ellis, N. C. (Philipp). The birds that breed at Woodward, Okla. (Lantz), may constitute a far removed outpost from the lower Missouri contingent, while the few individuals nesting in the vicinity of Tucson, Ariz. (Rhoads), are separated by many miles of desert from their nearest neighbors in southern California.

A few Florida gallinules have wandered north to Halifax, N. S., November 18, 1888 (Austen); Kentville, N. S., September 20, 1886 (Chamberlain); St. John, N. B., September, 1880 (Brewster); Calais, Me. (Boardman); Quebec City, Canada, May 28, 1892 (Dionne); Beaumaris, Ont. (Fleming); Bay City, Mich., May 2, 1891 (Eddy); near Vermilion, S. Dak., late April, 1899 (Sweet); Colorado Springs, Colo., May 9, 1882 (Allen and Brewster); and near Fort Verde, Ariz., September 26, and November 1, 1884 (Mearns).

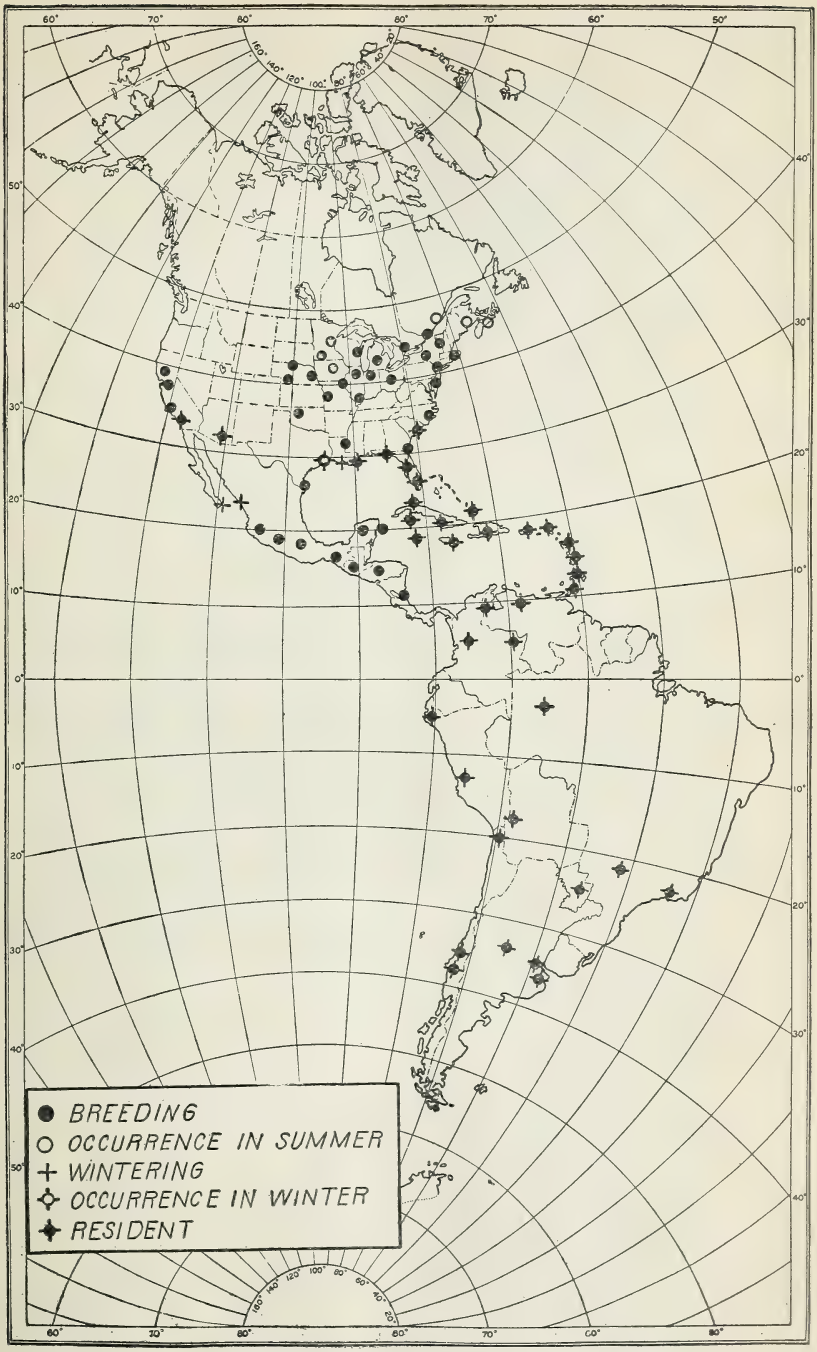

FIG. 18.—Florida gallinule (*Gallinula galeata*).

Winter range.—The Florida gallinule seems to be resident throughout its range in Middle and South America and north to Ashepoo Station, S. C., December 30 and 31, 1904 (Murphy); Tallahassee, Fla. (Williams); Vermilion Bay, La. (McAtee); Lake Surprise, Texas, December 8–11, 1910 (McAtee); San Pedro, Ariz. (Scott); and Los Angeles, Cal. (Swarth). A laggard was noted at Palmer, Mass., December, 1909 (Morris).

Spring migration.—The Florida gallinule arrived at Washington, D. C., April 19, 1892 (Hasbrouck); Waynesburg, Pa., April 26, 1894 (Jacobs); Philadelphia, Pa., average April 23, earliest April 16, 1909 (Miller); Canandaigua, N. Y., April 12, 1905 (Antes); Cambridge, Mass., April 29, 1895 (Faxon); Ferrisburgh, Vt., April 28, 1879 (Robinson); East Sullivan, Me., May 5, 1883 (Knight); Montreal, Canada, May 19, 1892 (Wintle); Versailles, Ky., April 11, 1905 (Brodhead); Chicago, Ill., average May 9, earliest April 24, 1902 (Blackwelder); central Indiana, average May 2, earliest April 29, 1908 (Ratliff); New Bremen, Ohio, April 19, 1909 (Henninger); Oberlin, Ohio, average May 2, earliest April 20, 1907 (Jones); Vicksburg, Mich., average May 2, earliest April 24, 1904 (Corwin); Dunnville, Ont., May 8, 1884 (McCallum); Grinnell, Iowa, April 28, 1890 (Kelsey); National, Iowa, April 18, 1909 (Sherman); near Madison, Wis., average May 1, earliest April 26, 1908 (Vorhies); Minneapolis, Minn., May 10, 1905 (Moore); Lawrence, Kans., April 19, 1907 (Hanna); Dunbar, Nebr., April 27, 1899 (Wolcott). Near the southern limit of the breeding range at Sacaya, Chile, the species nests up to 11,000 feet altitude and the eggs are here laid during January and February (Lane); at Concepcion, Argentina, young were found September 29 and eggs the middle of October, 1880 (Barrows); and at Cantagallo, Brazil, young in late October, and eggs January 28, (Euler). It is thus evident that south of the Equator the breeding season lasts about six months from September to February. Nearly the whole year is represented north of the equator, for young 10 days old were found in Jamaica January 23, 1891, and eggs in May and June (Scott); while in Barbados eggs were taken July, 1888 (Fielden); and in Cuba, according to Gundlach, the gallinule nests from June to December. Eggs were found at Mount Pleasant, S. C., May 21, 1904 (Wayne); Philadelphia, Pa., May 22, 1905 (Miller); Stratford, Conn., June 25, 1891 (Lucas); North Truro, Mass., May 22, 1892 (Thayer); Cambridge, Mass., June 5, 1890 (Brewster); Lake Bomaseen, Vt., May 28, 1881 and 1882 (Richardson); Rodney, Miss., May 10, 1887 (Mabbett); Kalamazoo, Mich., May 25, 1891 (White); Dunnville, Ont., May 29, 1884 (McCallum); Pewaukee, Wis., May 20, 1875 (Goss); Fort Snelling, Minn., May 28, 1903 (specimens in U. S. National Museum); Brownsville, Tex., May 16, 1877 (Sennett); and near Los Angeles, Cal., April 15, 1890 (Howard).

Fall migration.—The latest birds noted at Point Pelee, Ont., were seen October 9, 1906 (Taverner and Swales); Vicksburg, Mich., average October 1, latest November 16, 1910 (Corwin); Oberlin, Ohio, November 11, 1890 (Jones); New Bremen, Ohio, November 16, 1909 (Henninger); Calumet, Ill., October 23, 1876 (specimen in U. S. National Museum); St. Louis, Mo., October 3, 1905 (Widmann); Montreal, Canada, November 5, 1898 (Wintle); Portland, Me., October 15, 1907 (Norton); Cambridge, Mass., November 9, 1898 (Hathaway); Point Judith, R. I., November 29, 1900 (Hathaway); Shelter Island, N. Y., October 28, 1898 (Worthington); Washington, D. C., October 26, 1876 (Jouy); and Philadelphia, Pa., November 16, 1909 (Miller).

EUROPEAN COOT. *Fulica atra* Linnaeus.

The normal range of the European coot includes most of Europe, the northern part of Africa, northern and central Asia, India, and southeast to the Philippines.

A few specimens have been taken in southern Greenland, where it is an accidental visitant.

COOT. *Fulica americana* Gmelin.

Range.—North America from central British Columbia, southern Mackenzie and Quebec, south through the West Indies and Central America to Panama.

Breeding range.—During the breeding season the coot shuns southeastern United States and the lower Mississippi Valley, while it breeds abundantly in the same latitudes of western United States and even south in Mexico to Jomatla, Vera Cruz (Sharpe), and Acapulco, Guerrero (Nelson). There are more or less isolated breeding colonies on Cozumel Island, Yucatan (Sharpe), and the Lake of Duenas, Guatemala (Salvin and Sclater), while the species is a common breeder in Jamaica (Scott) and in Porto Rico (Wetmore). The coot is a rare breeder along the Atlantic coast, but a few pairs have been known to nest from Philadelphia, Pa. (Miller), north to Long Island City, N. Y. (Braislin), and according to Nuttall it nested once near Cambridge, Mass., but it is not now known to breed anywhere on the New England coast. It has nested at Lake Bomaseen, Vt. (Howe), and is a common breeder west of the Alleghenies south to Ithaca, N. Y. (Reed and Wright), Port Clinton, Ohio (Langdon), Mount Carmel, Ill. (Ridgway), Reelfoot Lake, Tenn. (Rhoads), and Eureka Springs, Ark. (Smith), whence the breeding range extends southwest through Decatur, Tex. (Donald) to Brownsville, Tex. (Merrill). On the Pacific coast the species breeds south in Lower California to Purisima (Thayer). It may occasionally breed in southern Louisiana, for some twenty birds were seen June 19, 1914, on the southern side of Lake Ponchartrain (Fisher).

Northward the coot breeds to Quebec City, Canada (Dionne), Ottawa, Ont. (White), Sudbury, Ont. (Alberger), Kelley Brook, Wis.

(Schoenebeck), Oak Point, Man. (Small), Chemawawin, Keewatin (Nutting), Prince Albert, Sask. (Ferry), Fort Simpson, Mackenzie (Preble), and Caribou District, B. C. (Brooks). It has been known to wander north to New Brunswick (Chamberlain), Nova Scotia (Downs), St. John, Newfoundland (Hawley), Sandwich Bay, Que. (Grenfell), Nain, Que. (Turner), Jacobshavn, Greenland, 1854 (Harting), Godthaab, Greenland, 1854 (Newton), Fort Yukon, Alaska (Nelson), and Sitka, Alaska (Hartlaub).

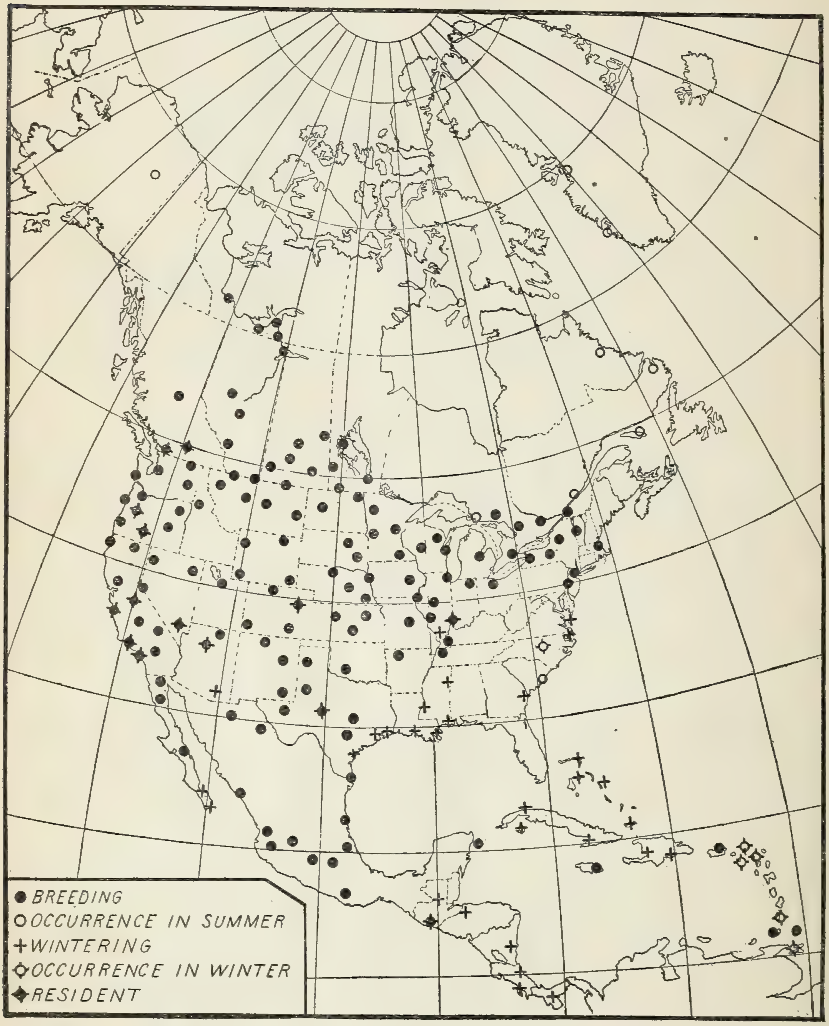

FIG. 19.—Coot (*Fulica americana*).

Winter range.—The coot migrates south in winter through Central America to Lagunadel Castillo, Panama (Salvin), and to the northern

Bahamas, Cuba, and Haiti. It winters in southern United States, north on the Atlantic coast to Cobb Island, Virginia (Rives), in the interior to Mount Carmel, Ill. (Ridgway), San Angelo, Tex. (Lloyd), San Pedro, Ariz. (Scott), Pecks Lake, Ariz. (Mearns), and St. Thomas, Nev. (Bailey); and along the whole Pacific coast from San Jose del Cabo, Lower California (Frazar), to Chilliwack and Okanogan, B. C. (Brooks). It has been noted in winter near Cambridge, Mass. (Brewster), Buckhannon, W. Va. (Day), and at Barr Lake, Colo. (Hersey and Rockwell), and in late fall migration in Bermuda (Hurdis), and on Clipperton Island, southwest of Mexico (Beck).

Spring migration.

Place.	Number of years' records.	Average date of spring arrival.	Earliest date of spring arrival.
Raleigh, N. C			Apr. 6,1898
Scott Depot, W. Va	3	Mar. 19	Mar. 15,1907
Gunpowder Marsh, Md			Mar. 14,1893
Renovo, Pa			Mar. 5,1900
Erie, Pa			Mar. 28,1898
Branchport, N. Y. (near)	4	Apr. 22	Apr. 12,1888
Cambridge, Mass			Apr. 18,1890
Montreal, Canada			Apr. 28,1893
Quebec City, Canada			May 14,1890
Knoxville, Tenn			Mar. 27,1909
Versailles, Ky			Mar. 24,1904
Central Missouri	9	Mar. 17	Feb. 23,1898
Southern Illinois	3	Mar. 15	Feb. 26,1890
Lake Maxinkuckee, Ind			Jan. 10,1901
English Lake, Ind			Feb. 14,1891
Brookville, Ind	6	Mar. 31	Mar. 26,1888
Chicago, Ill	7	Mar. 25	Mar. 19,1886
Rockford, Ill	7	Apr. 4	Mar. 19,1891
Waterloo, Ind	4	Apr. 9	Mar. 17,1907
Oberlin, Ohio	9	Apr. 2	Mar. 9,1908
Vicksburg, Mich	7	Mar. 28	Mar. 19,1904
Southern Ontario	5	Apr. 23	Mar. 15,1885
Ottawa, Ont	3	May 3	Apr. 27,1892
Keokuk, Iowa	6	Mar. 28	Mar. 13,1900
Sioux City, Iowa	7	Mar. 25	Mar. 21,1909
Laporte, Iowa	5	Mar. 30	Mar. 16,1886
Delavan, Wis	3	Mar. 26	Mar. 24,1894
La Crosse, Wis	6	Apr. 2	Mar. 25,1910
Heron Lake, Minn	8	Apr. 1	Mar. 16 1894
Lanesboro, Minn	4	Apr. 18	Apr. 16,1892
Minneapolis, Minn	5	Apr. 19	Apr. 15,1906
White Earth, Minn	3	May 2	May 1,1880
Manhattan, Kans			Mar. 19,1897
Onaga, Kans	5	Apr. 12	Mar. 31,1903
Southeastern Nebraska	4	Apr. 3	Mar. 18,1909
Southeastern South Dakota	7	Apr. 7	Mar. 27,1910
Reaburn, Man	8	Apr. 28	Apr. 17,1895
South Qu'Appelle, Sask	6	Apr. 25	Apr. 20,1908
Osler, Sask			May 1,1893
Fort Vermilion, Alta			May 8,1909 and 1911.
Fort Simpson, Mackenzie			June 1,1905
Gila City, Ariz			Mar. 1,1894
Camp Grant, Ariz			Mar. 20,1869
Boulder, Colo			Feb. 27,1904
Loveland, Colo	3	Mar. 21	Mar. 10,1887
Cheyenne, Wyo			Apr. 12,1888
Rathdrum, Idaho	2	Apr. 26	Apr. 25,1903
Great Falls, Mont			Apr. 26,1892
Chilliwack, B. C	3	Apr. 10	Rare, winter.

The coot is reported to remain in northern Florida to May 2, 1908, average, April 30; Canaveral, Fla., April 29, 1889; Washington, D. C., May 2, 1904; southern Louisiana, May 18, 1898, average, April 18; Bay St. Louis, Miss., May 10, 1902; and Brookville, Ind., May 16, 1884.

Eggs of the coot have been reported at Newark, N. J., May 30, 1907 (Abbott); Ithaca, N. Y., May 25, 1907 (Reed and Wright); Kewanee, Ill., May 22, 1893 (Muchison); Terre Haute, Ind., May 19, 1888 (Blatchly); English Lake, Ind., May 11, 1890 (Deane); Agricultural College, Mich., May 15, 1897 (Hankinson); Dunnville, Ont., June 1, 1884 (McCallum); Fort Snelling, Minn., May 27, 1891 (specimens in U. S. National Museum); Brownsville, Tex., May 16, 1877 (Sennett); Decatur, Tex., May 19, 1889 (Donald); Barr Lake, Colo., April 27–July 21, 1907 (Rockwell); Long Lake, Man., June 5, 1894 (Arnold); Fort Chippewyan, Alta., June 7, 1880 (MacFarlane); Purisima, Lower California, May 17, 1909 (Thayer); Escondido, Cal., April 20, 1903–July 1, 1906 (Sharp); and Fort Klamath, Oreg., May 13, 1878 (Merrill).

Fall migration.

Place.	Number of years' records.	Average date of the last one seen.	Latest date of the last one seen.
Montreal Canada	3	Oct. 18	Oct. 24, 1892
Ottawa, Ont	5	Oct. 17	Oct. 23, 1909
Southern Maine	5	Oct. 13	Oct. 24, 1904
Durham, N. H			Oct. 10, 1897
Cambridge, Mass			Dec. 20, 1903
Newport, R. I	4	Nov. 7	Dec. 20, 1900
Portland, Conn			Nov. 14, 1892
Branchport, N. Y	2	Nov. 11	Nov. 22, 1896
Renovo, Pa	7	Oct. 25	Nov. 2, 1894
Washington, D. C	4	Oct. 21	Oct. 31, 1899
Winfield, W. Va			Nov. 12, 1907
Raleigh, N. C			Dec. 1, 1882
South Qu'Appelle, Sask			Oct. 21 1907
Aweme, Man			Oct. 15 1909
Sioux Falls, S. Dak	3	Nov. 11	Nov. 14 1909
Lincoln, Nebr	2	Nov. 14	Nov. 18 1900
Onaga, Kans	2	Oct. 23	Oct. 26 1899
Minneapolis, Minn	3	Oct. 17	Nov. 6 1906
Lanesboro, Minn			Nov. 10 1892
Madison, Wis			Nov. 24 1909
Chicago, Ill	4	Oct. 17	Nov. 6 1906
New Harmony, Ind	2	Oct. 21	Oct. 27, 1902
Oberlin, Ohio	2	Oct. 15	Nov. 26, 1906
Vicksburg, Mich	6	Nov. 19	Dec. 5 1909
Keokuk, Iowa	5	Nov. 12	Dec. 21, 1899
Kansas City, Mo			Nov. 23, 1904
Sawtooth Lake, Idaho			Oct. 2, 1890
Terry, Mont			Oct. 4, 1903
Mosca, Colo. (near)			Nov. 5 1907
Chattanooga, Okla			Nov. 28, 1904

The first coot arrives in northern Florida, in the fall, on the average October 20, earliest October 17, 1908; Washington, D. C., September 20, earliest September 1, 1890; Erie, Pa., September 6, earliest September 5, 1875; Winfield, W. Va., August 20, 1907; Cambridge, Mass., August 16, 1895; Rodney, Miss., September 24, 1888; Jasper City, Mo., September 20, 1902; and Clipperton Island, southwest of Mexico, November 19, 1901.

[CARIBBEAN COOT. *Fulica caribaea* Ridgway.

The Caribbean coot is recorded from the Lesser Antilles on the islands of Anguilla, Guadeloupe, and St. John.]

[AMERICAN FINFOOT. *Heliornis fulica* (Boddaert).

The American finfoot ranges from Matto Grasso, Brazil, and Pebas, Peru, north through Guiana, Venezuela, Ecuador, Colombia, and Central America to the Belize River, British Honduras, the Coatzacoalcos River, and Buena Vista, Vera Cruz.]

[GUATEMALAN SUN BITTERN. *Eurypyga major* Hartlaub.

Ranging into northern South America, in Colombia and Ecuador, the Guatemalan sun bittern is rare in Central America, where it has been recorded from Panama, Costa Rica (both coasts), and from the mountains southeast of Coban, Guatemala.]

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